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THE GIFT OF
State Bd. of health

FOURTH ANNUAL REPORT

OF THE

STATE BOARD OF HEALTH

OF INDIANA,

FOR THE

COMPLIMENTS OF

Indiana State Board of Health,

C. N. METCALF, M. D., Sec'y.

MEMBERS:

SAMUEL R. SEAWRIGHT, M. D., President	Lafayette.
WILLIAM LOMAX, M. D	Marion.
WILLIAM A. FRITSCH, M. D	Evansville.
SAMUEL S. BOOTS, M. D	Greenfield.
CHARLES N. METCALF, M. D., Secretary	Indianapolis.

TO THE GOVERNOR.

INDIANAPOLIS:
WM. B. BURFORD, CONTRACTOR FOR STATE PRINTING.
1886

FOURTH ANNUAL REPORT

OF THE

STATE BOARD OF HEALTH

OF INDIANA,

FOR THE

FISCAL YEAR ENDING OCTOBER 31, 1885,

Together with the Fourth Annual Report of the Bureau of Vital and Sanitary Statistics, by C. N. Metcalf, M. D., Secretary of the Board.

MEMBERS:

Samuel R. Seawright, M. D., President	Lafayette.
William Lomax, M. D	Marion.
William A. Fritsch, M. D	Evansville.
Samuel S. Boots, M. D	Greenfield.
Charles N. Metcalf, M. D., Secretary	Indianapolis.

TO THE GOVERNOR.

INDIANAPOLIS:
WM. B. BURFORD, CONTRACTOR FOR STATE PRINTING.
1886

RESOLUTION OF THE BOARD RELATIVE TO PAPERS PUBLISHED IN ITS ANNUAL REPORT.

Resolved, That no papers shall be published in the Annual Report of this Board except such as are ordered or approved for purposes of such publication by a majority of the members of the Board, and that any such paper shall be published over the signature of the writer, who is entitled to the credit of its production, as well as responsible for the statement of facts and opinions expressed therein.

EXECUTIVE DEPARTMENT,
INDIANAPOLIS, December 31, 1885.

Received and examined by the Governor, and referred to the Auditor of State for verification of financial statement.

OFFICE OF AUDITOR OF STATE,
INDIANAPOLIS, January 20, 1886.

I hereby certify that the report of the expenditures of the State Board of Health for the fiscal year of 1884-5 correspond with the records of this office.

JAMES H. RICE,
Auditor of State.

JANUARY 20, 1885.

Returned by the Auditor of State with the foregoing certificate, and transmitted to the Secretary of State to be filed and preserved in his office, and published pursuant to the order of the Commissioners of Public Printing.

PIERRE GRAY,
Private Secretary.

Filed in the Office of the Secretary of State this 20th day of January, A. D. 1886.

WILLIAM R. MYERS,
Secretary of State.

176653

BOARD OF HEALTH REPORT.

To Hon. Isaac P. Gray,
Governor of the State of Indiana:

Herewith is presented the Fourth Annual Report of the State Board of Health for the fiscal year ending October 31, 1885, as provided in section 2 of the act creating said Board, approved March 7, 1881:

The Board has just completed the fourth year of its organization. During this period it has laid the foundation of sanitary work upon a broad and comprehensive basis. It has disseminated among the people new and enlightened thoughts of a practical character on sanitation. It has met and controlled all epidemics that have made their appearance within its jurisdiction. Notwithstanding the inestimable service rendered and good accomplished in preserving the health of the citizens by the removal of all sources of disease which have come under its observation, it has met with opposition from those who ought by their education to be its friends, and the law of its creation has been threatened with repeal. However, if it will continue to exert its influence in the future as in the past by showing itself worthy of the duties that have been confided to the care of its members, and if they will employ their best energies in making themselves proficient in the study of hygiene and State sanitation, so as to be able to perform their work in a thorough manner, teach the people correctly, and spread among them new and advanced ideas on these subjects, public opinion will force all opposition to vanish. New powers will be granted, as well as more liberal appropriations, to enable it to carry on its work efficiently. Thus, instead of being retarded in its work and onward career, its influence will continue to advance and grow in the hearts of the people. During the year quarterly meetings have been regularly attended by all the members, and each has taken a deep interest in the work, and, at all times, have displayed their willingness to do all in their power, as a body and as individuals, to aid and assist in preserving the public health.

Nearly three thousand copies of the Third Annual Report have been distributed throughout the State. Other State Boards have been furnished copies in exchange; copies have been placed in various public libraries of the country. Individuals who have bestowed favors upon the Board and are interested in the advancement of measures for the preservation of the public health, have been favored with copies.

An act passed by the last General Assembly, approved April 13, 1885, providing for public printing, binding and stationery, limits the number of reports to be issued by this Board annually to three thousand copies. The demand is so general that this number is insufficient to supply it and should be increased. This report contains an inventory of the property belonging to the Board, a financial exhibit showing how the money appropriated to this Department has been expended, a catalogue of books in the library, list of pamphlets and circulars issued by the Board within the year; the Attorney General's opinions upon questions asked in an official way, a general outline of the work of this department, together with such legislation recommended as the Board deem important and in the interest of public health; a series of articles on hygiene and sanitary science and subjects relative thereto, by professional men and others interested in the public health; verbatim reports of contagious and infectious diseases by county health officers; statistical tables compiled from the returns of births, deaths, marriages, contagious and infectious diseases arranged so as to convey as much information as possible to those interested in the study of hygiene. These tables will show that our death returns are defective, which is due to the fact, that in many localities those invested with authority fail to enforce the law.

In another part of this report we will suggest an amendment to the present law, which, if adopted by the next General Assembly, will make our death returns as accurate and reliable as those of other States. Much of the executive work of this department can not be given, and would be of no importance in a printed report. Many questions propounded, advice given, and results obtained relative to drainage, ventilation, and sanitary arrangements of public and private buildings, water supply of cities and towns, and the abatement of various nuisances would be wholly inappropriate in this report. The Board have had many investigations made, such as analysis of water and sanitary inspections of localities, to determine the outbreak of various epidemic diseases, all of which would be of no interest to the public, except to those living in the infected districts. All questions submitted to this department, even those of a trivial character, have been promptly answered. The masses are gradually educated in sanitary matters, and begin to comprehend that many diseases are preventable, and they individually are responsible, as they originate either in polluted water or bad sanitary surroundings. The people and the public press recognize the utility of a State Board of Health, and wherever it has been necessary to enforce the law they have unmistakably demonstrated their willingness to sustain the action of the Board.

OFFICE SUPPLIES ON HAND.

50 copies Rules and Regulations.
9,000 books, birth, death and epidemic disease returns.
3,000 marriage returns.
150 blank quarterly reports.
50 quires wrapping paper.
300 envelopes.
500 letter heads.
3,000 tabulating blanks.
100 diphtheria blanks.
100 scarlatina blanks.
100 typhoid fever blanks.
100 small pox blanks.
300 blank surveys of school houses.
1 quart black ink.
1 bottle red ink.
4 erasers.
1 whetstone.

PROPERTY OF THE BOARD.

One office desk.
One small writing desk.
Two tables.
One ruling desk.
Two walnut book cases.
One filing case.
One case of drawers.
Three office chairs.
Eleven walnut chairs.
One stool.
One stepladder.
One hat rack.
One water cooler.
Carpets and matting.
One washstand, bowl, pitcher and mirror.
One dozen towels.
Four inkstands.
One copying press.
One post-office scales.
One clock.
One hektograph.
One invoice book.
Three cuspidors.
Two waste baskets.
One geological map of Indiana.
Eight weather maps.
Six framed mottoes.
Gas fixtures and awnings.

FINANCIAL EXHIBIT.

The following is a statement of the receipts and expenditures for the fiscal year commencing November 1, 1884, and ending October 31, 1885:

All accounts have been submitted to the Board at its regular meetings, allowed, certified to by the President and Secretary, and audited by the Auditor of State, before warrants were drawn for the same. Out of the annual appropriation of five thousand dollars to carry on the work of this department, the members have been paid all actual expenses incurred by attending regular and special meetings of the Board, as well as expenses of sanitary inspections of various sections, and the different public institutions under the control of the State government. (Reports of inspections made by the members of the Board will be found in another part of this report.) From this fund we also pay office rent and current expenses of the same, clerk hire, printing bills, including all publications of the Board, except the annual report. The Board supplies all of the county, city and town health boards with physicians' blanks for the return of births, deaths contagious and infectious diseases, county clerks' blanks for the purpose of making returns of marriages, and also furnish county boards of health with blanks to make regular quarterly reports, as well as blanks for special reports of contagious and infectious diseases, programmes and all necessary printing for sanitary conventions held in the State.

At the close of the fiscal year, after meeting all obligations, we have a balance of three dollars and fifty cents ($3.50).

FINANCIAL EXHIBIT.

STATE BOARD OF HEALTH.

RECEIPTS.

By appropriation	$5,000

DISBURSEMENTS.

Expenses of Members.

W. W. Vinnedge	$20	50
J. W. Compton	16	60
J. M. Partridge	93	50
William Lomax	70	10
Samuel R. Seawright	109	35
William A. Fritsch	186	55
Samuel S. Boots	41	70

Salaries.

E. S. Elder, Secretary	$634 00
C. N. Metcalf, Secretary	573 26
D. N. Berg, clerk	1,000 00
F. M. Stewart, clerk	560 00
S. W. Burns, janitor	109 00
D. T. Praigg	21 00

Miscellaneous.

Rent	240 00
Postage	125 00
Telephone	45 00
Gas	11 52
Wall paper	2 97
W. B. Burford, printing	336 75
Carlon & Hollenbeck, printing	484 75
Sentinel Company, printing	8 00
E. S. Elder, office expenses	151 45
C. N. Metcalf, office expenses	105 00
A. J. Lyons, water-cooler	3 50
Sanitary News	15 00
W. Hadley	12 00
J. N. McCormack	20 00
Total	$4,996 50
Total balance on hand	3 50
Total	$5,000 00

LIBRARY.

The library embraces a collection of works, by recognized authorities, on diseases of domestic animals, bacteria, cholera, drainage, food, hygiene, preventive medicine, sanitary science, sewers and sewage, small-pox, suicide, typhoid fever, water, zymotic diseases, and miscellaneous works.

As there was a constant demand for works of this character by health officers, physicians and others who desired to pursue the study of sanitary subjects and matters relating to public health, the Board adopted a rule authorizing the secretary to loan these works to responsible parties who wished to investigate subjects of interest to the department, or who desired to use them in the preparation of articles for publication, or to use in discussions before societies or conventions interested in the advancement of sanitary science.

The following is a complete catalogue of the works belonging to the library:

AMERICAN HEALTH PRIMERS (12 VOLS.), TITLES AS FOLLOWS:

Brain Work and Overwork	Wood.
Eyesight and How to Care for It	Harlan.
Hearing and How to Keep It	Keen.
Long Life and How to Reach It	Richardson.
Our Homes	Hartshorn.
Sea Air and Sea Bathing	Packard.
School and Industrial Hygiene	Lincoln.
Skin, Health and Diseases	Bulkley.
Summer and Its Diseases	Wilson.
The Mouth and the Teeth	White.
The Throat and the Voice	Cohen.
Winter and Its Dangers	Osgood.

APPLETON'S HEALTH PRIMERS (8 VOLS).

Baths and Bathing . . . .
Exercise and Training . . . .
Personal Appearances . . . .
Premature Death—Its Promotion or Prevention . . . . .
The House and its Surroundings . . . .
The Heart and Its Functions . . . .
The Nervous System . . . .
The Skin and Its Troubles . . . .

ANIMALS AND THEIR DISEASES.

Actinomykosis	Fleming.
Animal Diseases and Their Relation to Public Health	Billings.
Animal Plagues	Fleming.
Contagious Diseases of Cattle	Fleming.
Contagious Diseases of Domestic Animals, 5 vols., viz: 1879-80-81-82-83	United States Bureau.
Diseases of Live Stock	Teller.
*Human and Animal Variola	Fleming.
Lung Plague Among Cattle	Law.
Veterinary Science (2 vols.)	Williams.

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*Diseased Meats and Their Relation to Health—Wenzel.

BACTERIA.

Bacteria	Gradle.
The Bacteria	Maguire.

CHOLERA.

Cholera	McPherson.
Cholera, Asiatic, History of	Macnara.

DRAINAGE.

Agricultural Drainage	Denton.
Drainage	Gerhardt.
Farm Drainage	French.
Land Drainage	Reeves.
Our Homes	Murphy.

FOOD.

Food and Poisons	Bligthe.
Milk; Its Adulterations, Analysis, etc	Morris.

HYGIENE.

Bazar Book of Health	Harper.
Bible Hygiene	By a physician.
Hand Book of Hygiene	Wilson.
Health in Common Schools	———————
How to Live	Wilson.
Hygiene and Public Health (2 vols.)	Buck.
Hygiene and Laws of Health	Corfield.
Maintenance of Health	Fothergill.
Manual of Hygiene	Parkes.

PREVENTIVE MEDICINE.

Eyesight, Good and Bad	Carter.
Dangers to Health	Teale.
Preventive Medicine	Richardson.
Seven Sources of Health	Strange.
Some of the Preventive Causes of Insanity	Kemper.

SANITARY SCIENCE.

American Sanitary Engineer	———————
Diseases and Putrescent Air	Rowan.
Drainage for Health	Wilson.
Hand Book of Sanitary Science	Marsh.
House Drainage and Water Sewer	Bayles.
House Drainage	Gerhardt.
House Sanitation	Denton.
Mechanics of Ventilation	Rafter.

Sanitary Care and Treatment of Children	Anderson and Jacobi.
“ Construction of Dwellings	Corfield.
“ Condition of Houses	Waring.
“ Drainage	Waring.
“ Engineering	Latham.
“ Plumbing	Helyer.
Sanitarian, The (vols. 1 to 13)	Bell.
Steam Heating	Waldon.
Simplicity in Sanitation	Black.
Ventilation and Warming	Drysdale and Hayward.
Ventilation	Leeds.
Ventilation	Billings.
Ventilation of Buildings	Butler.

SEWERS AND SEWAGE.

Disposal of Sewage	Robinson.
Sewers and Drains	Adams.
Sewer and Gases	DeVarona.
Sewer Gas and Its Dangers	Brown.
Sewage and Its Utilization	Corfield.

SEPULTURE.

Sepulture	Wicks.

SMALL-POX.

Essentials of Vaccination	Hardway.
Report of Commissioners on Small-Pox and Fever Hospitals	London.
Vaccination	Edwards.
Vaccination	Seaton.

SUICIDE.

Suicide	Morcelli.
Suicide	O'Dea.

TYPHOID FEVER.

Enteric Fever	Welch.
Typhoid Fever	Budd.

WATER.

Guide to Examination of Water	MacDonald.
Potable Water	Folkhard.
Sanitary Examination of Water	Fox.
Water	Parry.
Water Analysis	Frankland.
Water and Water Supply	Corfield.
Water Supply	Nichols.

ZYMOTIC DISEASES.

Contagious Diseases	Morgan.
Contagiousness of Consumption	Yeo.
Common Nature of Epidemics	Smith.
Diphtheria	Jacobi.
Diphtheria	Semple.
Epidemics of the Middle Ages.	Hecker.
Erysipelas and Child-bed Fever	Minor.
History of Epidemics	Bascom.
Hospitalism and Zymotic Diseases	Kennedy.
Inquiry into Physical Causes of Epidemics	Howe.
Malaria	Edwards.
Relation of Micro-Organism	Belfield.
Remote Causes of Epidemics	Parkin.
Scarlatina Statistics	Minor.
Syphilis and Marriage	Fournier.
The Great Social Evil	Logan.
Tuberculosis in Man	Bodine.
Tuberculosis	Sattler.
Yellow Fever. Memphis Epidemic	Keating.
Zymotic Diseases.	Wolf.

MISCELLANEOUS.

Alcohol and Tobacco	Miller and Lizar.
Alcoholic Inebriety	Parrish.
Aristology, or Art of Dining	Walker.
Art of Prolonging Life	Hufland.
Causes of Color Among Races	Sharer.
Color Blindness	Jeffries.
Diseases of Interior Valley of North America	Drake.
Drugs that Enslave	Kane.
Floating Matter	Tyndale.
Hospitals and Infirmaries.	Oppert.
Human Faculty and Its Development	Galton.
Human Body	Martin.
Intermarriage	Walker.
International Health Exhibition. Proceedings of	London.
Labor Among Primitive People	Engleman.
Legal Medicine (2 vols.)	Tidy.
Management of Children	Ellis.
Medical Nursing.	Anderson.
Medical Economy	Tort.
Mineral Springs	Walton.
Notes on Contagious Diseases of the Eye	Agnews.
Nurses' Companion	Culingworth.
Our School Houses	Chittenden.
Philosophy of Marriage	Ryan.
Physical Education	Oswald.
The Black Arts of Medicine	Jackson.

The Dwelling and Its Surroundings . . . . Hatch.
The Hot Springs of Arkansas . . . . Jelk.
The Jukes . . . . Dugdale.
Vital Statistics . . . . Plunkett.

Cholera Epidemic in the United States, 1873 . . . .
Cholera in Europe, 1884 (pamplet), ...
Diphtheria in Michigan . . . .

Hand Book for Ship's Medicine Chest, 1881 . . . .
Kerosene . . . . Reeves.
Paris Electrical Exhibition, 1881 . . . .
Report of Method and Apparatus for Testing Inflammable Oils . . . . Elliott.
Railroad Accidents—Notes . . . . Adams.
Report on Yellow Fever in Louisiana in 1878 . . . . . .
Preliminary Report of Yellow Fever Epidemic, 1882 . . .
Proceedings of the New Orleans Sanitary Conference, June, 1884 . . . .
Quarantine and Operations of Louisiana Board of Health.

Proceedings of the Kentucky State Sanitary Council, 1884.
Proceedings of the Surgeons of the W., St. L. & P. R'y, 1882–83–84.
Public Health Commissioners of Illinois.
Sanitary Control of the Food Supply of New Jersey.
Statutes of Massachusetts Relative to Adulteration of Food and Drugs, 1884.
The Laws of Michigan Relative to Public Health.
The Sanitary News, Chicago.

Bible.
Webster's Unabridged Dictionary.
Dungleson's Medical Dictionary.
Thomas' Pronouncing Medical Dictionary.
United States Postal Guide.
Scrap Book.

REPORTS OF THE STATE BOARDS OF HEALTH, VIZ.:

Alabama, 1876, '77, '80, '81, '83, '84.
Arkansas, 1881.
California, 1870, '71, '76, '77.
Colorado, 1880.
Connecticut, 1878, '79, '81, '82, '83.
Delaware, 1880.
Illinois, 1878, '79, '80, '81, '83, '84.
Iowa, 1881, '83, '85, with registration report.
Kentucky, 1880, '81, '82.
Louisiana, 1872, '73, '75, '77, '78, '79, '83, '84.
Massachusetts, 1870, '71, '72, '73, '74, '75, '76, '77, '78, '79, '81, '82.
Michigan, 1871, '72, '73, '74, '77, '78, '80, '81, '82.
Mississippi, 1879.

Minnesota, 1875, '76, '77, '78, '79, '81.
New Jersey, 1881.
New York, 1867, '68, '71, '72, '73, '80, '81, '82.
New Hampshire, 1882, '83, '85, with registration report.
Rhode Island, 1879, '80, '81, '82, '84.
South Carolina, 1881, '82.
Tennessee, 1877, '80.
Wisconsin, 1876, '77, '78, '80, '81, '82, '84.

UNITED STATES REPORTS.

American Public Health Association.
Bureau of Education.
Bureau of Ethnology.
Chief of Engineers, U. S. Army.
Department of Agriculture.
Geological Survey of the United States.
Marine Hospital Service.
Master Plumbers' Association, Second Annual Report.
National Board of Health.
National Museum.
Navy Department, Bureau of Medicine and Surgery.
Secretary of Treasury on Epidemic Fund, 1884.
Smithsonian Institute.
Tenth Census U. S., vols. 1 to 11, inclusive. (Maps.)
Treasury Cattle Commission, 1882.
War Department.

MEDICAL SOCIETY REPORTS.

Alabama Medical Association, with the Rules, 1877, '80, '81, '85.
Maryland Medical and Chirurgical, Faculty, 1882.
Michigan Medical Society, 1882.
Nebraska Medical Society.
New Hampshire Medical Society, 1885.
Indiana Medical Society, 1878, '80, '81, '82, '83, '84, '85.
Louisana Medical Society. (Circular.)
South Carolina Medical Society.

INDIANA REPORTS.

Acts of 1881, '83, '85.
Annual Reports of Indiana, 1883.
Annual Report of Indianapolis Board oof Health, 1879, '80, '81, '82.
Agricultural Reports, 1876, '81, '82, '84.
Auditor of State, 1882, '83, '84.
Bureau of Statistics, 1882, '83.
House Journals, 1881.
Revised Statutes of Indiana, 1881.
Secretary of State, 1881, '82, '84.
Superintendent of Public Instruction, 1882, '84.
State Geologist, 1870, '73, '74, 75, '83, '84.

PUBLICATIONS BY THE BOARD.

Three thousand Annual Reports.

Ten thousand physicians' books for returns to health officers.

One thousand blank marriage returns from county health officers.

One thousand blank death returns from county health officers.

One thousand blank birth returns from county health officers.

One thousand blank contagious and infectious diseases returns from county health officers.

Five hundred programmes for sanitary convention held at Purdue University.

Five hundred programmes for sanitary convention held at New Castle.

Five hundred programmes for sanitary convention held at Angola.

Five hundred programmes for sanitary convention held at Mitchell.

Three thousand epidemic disease circulars.

One thousand special circulars to railroads.

Twelve hundred sanitary warnings.

Two hundred explanatory circulars.

Fifteen hundred school-house circulars.

SANITARY AUTHORITIES AND ASSOCIATIONS.

The following comprises a list of American Boards of Health and Sanitary Associations, together with the names and addresses of their executive officers. Thirty-one States have organized Boards of Health, and no State has ever taken a step backward and repealed a law which created one. Within the year the Legislatures of Kansas, Maine and Pennsylvania passed laws establishing Boards of Health in those States. These Boards have organized, and are now in operation. We omit the list of foreign associations published in previous reports, because it is unprofitable, and consumes too much valuable time to obtain a correct list; and, besides, it is of no especial value, as we do not exchange with them.

NATIONAL.

National Board of Health, Lieutenant W. P. Dunwoody, Secretary, Washington, D. C.

United States Marine Hospital Service, Dr. John B. Hamilton, Surgeon General, Washington, D. C.

American Public Health Association, Dr. Irving A. Watson, Secretary, Concerd, New Hampshire.

Sanitary Council of the Mississippi Valley, Dr. John H. Rauch, Springfield, Illinois.

STATE BOARDS OF HEALTH AND THEIR SECRETARIES.

STATE.	SECRETARY.	RESIDENCE.
Alabama	Jerome Cochrane	Montgomery.
Arkansas	J. A. Dibrell, Jr.	Little Rock.
California	F. W. Hatch	Sacramento.
Colorado	H. K. Steele	Denver.
Connecticut	C. A. Lindsley	New Haven.
Delaware	Wm. Marshall	Dover.
Georgia	V. H. Taliaferro	Atlanta.
Illinois	John H. Rauch	Springfield.
Indiana	C. N. Metcalf	Indianapolis.
Iowa	J. F. Kennedy	Des Moines.
Kansas	J. W. Redden	Topeka.
Kentucky	J. N. McCormack	Bowling Green.
Louisiana	S. S. Herrick	New Orleans.
Maine	A. G. Young	Augusta.
Maryland	C. W. Chancellor	Baltimore.
Massachusetts	S. W. Abbott	Wakefield.
Michigan	Henry B. Baker	Lansing.
Minnesota	C. N. Hewitt	Red Wing.
Mississippi	Wirt Johnson	Jackson.
Missouri	George Homan	St. Louis.
New Hampshire	Irving A. Watson	Concord.
New Jersey	Ezra M. Hunt	Trenton.
New York	Alfred L. Carroll	Albany.
North Carolina	Thomas F. Wood	Willmington.
Pennsylvania	Benjamin Lee	Philadelphia.
Rhode Island	Charles H. Fisher	Providence.
South Carolina	Henry D. Frazer	Charleston.
Tennessee	J. Berrien Lindsley	Nashville.
Texas	R. M. Swearingan	Austin.
West Virginia	Thomas A. Harris	Parkersburg.
Wisconsin	J. T. Reeve	Appleton.

THE BOARD.

On December 4, 1884, J. W. Compton, M. D., resigned his membership and Presidency of the Board in consequence of the pressure of business. On the same day Wm. Lomax, M. D., was elected President. On February 28, 1885, Dr. W. W. Vinnedge's membership expired by limitation. The two vacancies now existing were filled in March, 1885, by the appointment of the following named gentlemen: Samuel R. Seawright, M. D., of Lafayette, and Wm. A. Fritsch, M. D., of Evansville. J. M. Partridge, M.D., and Wm. Lomax, M. D., acting members of the Board, having never taken the oath of office, the Governor held that the offices with which they were in possession were vacant in consequence of their failure to comply with the requirements of the law. On April 16, 1885, Samuel S. Boots, M. D., of Greenfield, was appointed to fill one of the vacancies, and on May 8, 1885, Wm. Lomax, M. D., of Marion, was appointed to fill the other.

At a meeting of the Board held May 8, 1885, a reorganization was effected by the election of Samuel R. Seawright, M. D., President, and Charles N. Metcalf, M. D., of Indianapolis, Secretary, and an executive officer to fill the unexpired term of E. S. Elder, M. D., acting as Secretary.

Therefore the members of the Board and terms of office are as follows: Samuel R. Seawright, M. D., Lafayette, President; term expires February, 1889. William A. Fritsch, M. D., Evansville; term expires February, 1889. Samuel S. Boots, M. D., Greenfield; term expires February, 1887. William Lomax, M. D., Marion; term expires February, 1887. Charles N. Metcalf, M. D., Indianapolis, Secretary and Executive Officer; term expires November 3, 1885.

After the membership of J. W. Compton, M. D., and W. W. Vinnedge, M. D., ceased, the Board adopted the following resolutions and ordered them spread upon the record and a copy sent to each gentleman:

WHEREAS, J. W. Compton, M. D., first President of the Indiana State Board of Health, has tendered his resignation as President and has insisted upon our acceptance of the same, the reasons given being that this work seriously interfered with his professional duties at home; therefore,

Resolved, That it is with great reluctance and a feeling of sincere regret that we have accepted his resignation; that we have found him as an officer of the Board efficient and impartial; as a sanitarian, earnest and experienced; as a friend, genial and constant, and that we shall always entertain and cherish a most pleasant remembrance of our association with him.

WHEREAS, Dr. W. W. Vinnedge has ceased to be a member of this Board, by reason of the expiration of his term of office; therefore,

Resolved, That we feel that in our Board meetings we shall sadly miss his cordial greeting, his genial presence and wise counsel, and we shall hold him in highest esteem as an educated gentleman and a practical sanitarian, whose services we commend to the grateful consideration of the citizens of our State.

COUNTY BOARDS OF HEALTH.

Each county in the State has a board of health, in compliance with the law providing for the organization of such boards.

Within the year their secretaries, with two or three exceptions, have regularly made quarterly reports of marriages, births, deaths, contagious and infectious diseases to this office with commendable promptness. A few health officers in the State evidently have taken no interest in the work which they were elected to perform for their respective communities, but undoubtedly have regularly drawn pay for work poorly performed. It has been with the greatest difficulty that we have been able to obtain incomplete reports from these gentlemen, being compelled to make repeated requests and occasionally finding it necessary to appeal to the presidents of their respective boards before being successful. They may perhaps excuse themselves on the ground that they are poorly compensated for the labor which the law requires of them. In a few counties the commissioners are inclined to be parsimonious, in others they have committed the blunder of allowing the position to be filled by the lowest bidder, without any regard whatever to the qualifications of the applicant. The evil effects of the latter policy were forcibly brought to our notice in the past year. In one of the largest counties of the State, both as to territory and population, the *lowest bidder* secured the office, held it six months, drew his pay and then resigned without making a report of any kind to this Board; consequently half a year's vital statistics of that county will not be published. We can not say that these men ought to be excused for non-performance of duty upon the plea of insufficient remuneration. Each one knew the compensation he would receive before taking the office. No man should assume the responsibilities of any office, and especially that of health officer, let his salary be ever so meager, unless he can conscientiously perform the duties devolving upon him. The duties of a health officer are sacred; negligence should not enter there. They extend to the home of every citizen. The health, happiness and prosperity of the community depend upon an honest administration, the exercise of intelligence, good judgment and a knowledge of human nature. In selecting health officers, commissioners should choose men of intelligence and character, whose professional abilities and earnestness of purpose are recognized; whose opinions are sought, and who are respected by citizens of the county in which they reside. They should have an unmistakable interest in the growth and development of their counties, and have at heart the welfare of the people. The Board takes pleasure in saying that the present County Health Officers (except those mentioned) are competent officials, and have been honest and energetic. Wherever contagious or infectious diseases have made their appearance, they have prevented their spread and ultimately stamped them out by instituting vigorous sanitary measures, and by an intelligent administration of the law.

Whenever it has been found necessary to enforce the law for the purpose of abating nuisances considered detrimental to the public health, they have conscientiously performed their duty. It is gratifying to know that the work which has been accomplished by the county boards has received a cordial and emphatic endorsement from all parts of the State. It is the duty of a health officer to present to the people in a tangible form some of the known causes of diseases, and demonstrate in a practical way the relation of cause to effect. When the source from which a disease originates is unquestionably ascertained, it should be made known in a clear and concise manner, so all can understand and profit thereby. If an epidemic of diphtheria can be traced to defective sewerage, or an outbreak of typhoid fever to polluted water, it will do more to make a lasting impression on the minds of the people of the dangers of such contamination than any amount of theories or assertions that are not sustained by indisputable evidence.

Tracing the cause of a contagious or infectious disease to its source, and demonstrating the fact that it had its origin in filth and bad sanitary condition, is accomplishing a result which will be of lasting benefit to the community and the State. Those engaged in sanitary work should impress the idea upon the people, that individually they are responsible for many of the diseases with which they are afflicted. They should be instructed to look carefully after the sanitary condition of their homes and surroundings, such as heating, ventilation, plumbing and sewerage, the construction of privies and cesspools; and, above all, to watch with jealous care the purity of their water supply, and that at all times keep it free from pollution. The masses should be made acquainted with the best means of preventing and avoiding disease, and have pointed out to them the known causes of the same, and there should be distributed among them some of the established laws of sanitation. This would be teaching them disease prevenion, which "comprises whatever aids and perfects the growth of the human frame, preserves and increases its health, augments its vigor, prolongs its existence, and also includes the various methods of lessening and repelling disease and death."

In England, where strict sanitary laws have been enforced for years, the result has been that disease has been lessened one-third and life prolonged twenty-five per cent.

SANITARY CONVENTIONS AND SOCIETIES.

Within the year sanitary conventions were held under the auspices of this Board in the following cities: Lafayette, Angola, Mitchell and New Castle. The citizens were deeply interested in the discussion of all topics relating to the preservation of the public health. Members of the medical profession and others interested participated in the debates. In this way we are satisfied that much has been done to awaken an interest in the work of the Board. We hope other cities will hold similar conventions.

We also urge health officers to organize sanitary societies in their respective localities, as a means of educating the people upon hygiene and imparting to them a knowledge of sanitary laws. Papers treating of matters pertaining to the public health could be read before these organizations, and subjects relative thereto discussed. In this manner local sanitary interests would become more fully understood, and provisions would be made to secure universal protection against disease; and the ratio of sickness and mortality would be lessened. Such societies throughout the State would assist health officers in the prosecution of sanitary work, as their members would sustain the officers in the enforcement of the law. The Board will furnish printed constitutions to those desiring to form such organizations, as well as the necessary printing for sanitary conventions.

DISEASES OF DOMESTIC ANIMALS.

The statutes do not give this Board explicit charge of diseases of animals, many of which are communicable to man, and have a marked influence upon public health. Section 4987 of the Revised Statutes says: "The State Board of Health shall have the general supervision of the interests of the health and life of the citizens of this State." The Board believes, whenever the health or lives of the people are in danger from any of the animal diseases, that the section above referred to gives them power to act, and, in accordance therewith, have directed the *health officers* of the State to "take cognizance of all violations of the Revised Statutes in reference to diseased animals, and whenever any such are found, at once cause a rigid enforcement of the laws," and in all cases of infectious diseases in animals occurring within their jurisdiction, render prompt assistance in stamping out the malady.

Liability of the disease being communicated to man is not the only danger. Many sick animals are slaughtered, and their meat offered for sale. Swine in which cholera has made its appearance, cattle diseased with tuberculosis, cancer and abscesses are purchased at a nominal price by mercenary butchers, who make a practice of buying no other kind. They slaughter them in out-of-the-way places, on the outskirts of our cities, and dispose of the flesh in spite of the authorities. Every fiber of such an article contains disease germs, and should be avoided as a deadly poison, for whoever partakes of it becomes a sufferer. If it does not introduce disease directly into the system it will surely create a local disturbance from its poisonous irritation of the stomach and alimentary canal. As the cheapness of the article is its only recommendation, the poor and needy become its victims, who, if they can not have the luxuries of this life, should have what they partake of as food guaranteed to them as being of the purest quality.

As a remedy for this evil, one of the most terrible, the effects of which fall upon the unprotected citizen, we would suggest the passage of a law establishing abattoirs in every city of the State, to be built outside the corporate limits, and forbid slaughtering elsewhere. Also provide that all animals, before being killed must be critically examined by a competent person who should also be presnt during the slaughtering, and examine the viscera for disease. The person selected for this work should be either an experienced butcher or a veterinary surgeon. The latter would be better, who by profession and education would be particularly adapted to assume such a responsibility.

The educated veterinary surgeon would know that the advancement of his profession would depend upon his being strictly honest in the performance of his duties. The strict enforcement of such a law would relieve the people from the imposition that is now practiced upon them, and meat from healthy animals would be guaranteed to all.

Past experience teaches that without such restrictions thrown around the business, the consumer is at the mercy of these conscienceless scoundrels.

In August last, word was received from the Health Officer of Parke County that a man had died there from a disease which the attending physicians pronounced glanders. He also stated that many persons were satisfied that glanders had been prevailing among the horses of that locality for several years. The Secretary of the State Board at once secured the services of a *competent veterinary* surgeon, and in company with him, visited the home of the deceased. The two horses from which he was supposed to have taken the disease were critically examined and pronounced glandered. All others in the neighborhood that were suspected of being infected were investigated with care, and three more were found to have the disease. The owners of the diseased animal were advised (there being no law compelling) to at once kill them.

Others that had been exposed to the contagion were placed in quarantine to await developments. The stalls in the stables in which these horses had been housed were directed to be removed and destroyed by fire, and the buildings to be thoroughly lime washed and disinfected. In another part of this report will be found Dr. C. C. Morris' report of this, the second case of human glanders ever reported in the State. In the latter part of the summer the Health Officer of Monroe County detected a case of glanders within his jurisdiction. The animal was destroyed, and another, in which the true nature of the disease could not be determined, was placed under observation. We are satisfied there are many cases of glanders among the horses of this State.

They are brought in by horse traders from adjoining States where they would be destroyed if the disease was detected.

Within the year swine plague has prevailed in different parts of the State. This disease has been a subject of investigation by scientific men for years, and so far they have been unable to give us any definite knowledge of its nature, cause, prevention and treatment. This being the case it is not strange that the disease is so prevalent and destructive. As our laws do not provide for the destruction of animals affected with pleuro-pneumonia, glanders and cholera, and as it is the only method by which those diseases can be exterminated, we respectfully urge the necessity of placing the diseases of domestic animals in charge of the State Board of Health, with authority to destroy those affected with contagious or infectious diseases that are liable to be communicated to the human, and also provide for the appointment by the Governor of a State veterinarian with compensation sufficient to command the services of a competent one, who shall work under the direction of this department.

SANITARY SUPERVISION OF RAILROAD PROPERTY.

Our State, on account of its geographical position, is a net work of railroads, with more railways passing through it than any other State in the Union. They annually carry thousands of immigrants.

As the presence of Asiatic cholera in Europe has uniformly been followed by its appearance in this country, and as it invariably follows the line of commerce and travel, it will undoubtedly be brought to us by way of our railroads, if it comes within our borders. An epidemic of small-pox is prevailing in Canada, exceedingly virulent in its nature and destructive to human life. The authorities have been unable to compel a general vaccination or quarantine of those afflicted with the disease. It has crossed the borders of the Dominion, and extended into several of the New England and Eastern States.

In view of the threatened invasion of our State by these pestilential diseases, and not being provided with a system of immigrant inspection, railway property becomes a special object of sanitary supervision. Therefore, health officers should use extra vigilance inspecting the buildings and grounds belonging to railroad corporations and see that they are kept in a good sanitary condition. Depots should be properly heated, ventilated, cleaned and supplied with pure water, urinals and saloon closets should be suitably located with sufficient capacity to accommodate the traveling public, and kept so clean and free from foul odors that they will not offend the senses of the most delicate. Water, whether its source be a well, spring, stream, or lake should not be used if a privy vault be within fifty feet of it. When a vault is located within this distance of a water supply it should be abandoned, cleaned, disinfected and filled with dry earth, which is an excellent disinfectant, and a new one provided, located at the proper distance, made water-proof and kept inoffensive by ventilation and the use of disinfectants. Passenger coaches, especially those used in transporting immigrants, should be thoroughly cleansed and purified at the end of each trip. Their saloon closets should be kept clean and free from odors, and the floors well painted to prevent moisture soaking into the wood. All passenger coaches should be aired and their closets disinfected at least once each day.

FEMALE PRISON AND REFORMATORY.

This institution is situated east of Indianapolis, just outside of the city limits. The grounds, containing twelve acres, are beautifully laid out, studded with shade trees, and the fine lawns are laid out with walks and drives, well kept, and presenting a very attractive appearance.

The structure, a very substantial one, built of brick and stone, was erected in 1873, and affords room for about two hundred inmates. There are forty-eight women in the prison, and one hundred and thirty-five in the reformatory. The oldest prisoner is seventy-eight years of age, the youngest sixteen; eleven are life prisoners. The youngest in the Reformatory is nine years old. All who are physically able to do so are kept at some kind of work, such as washing, ironing, sewing, cooking, scrubbing, etc. In the reformatory department the inmates attend school half of the day; the rest of the hours they are kept employed, as in the other department. The children, we are told, compare favorably in point of intelligence with an equal number of children in other schools. No deaths have occurred among the inmates within the year. The hygienic condition of the prisoners is good, and the sanitary surroundings are the very best. The entire house, from cellar to garret, is scrupulously clean—so clean, in fact, that nowhere can there be detected foul odors of any kind. The Board of Managers consists of Mrs. Thomas A. Hendricks and Mrs. Charles M. Walker, of Indianapolis, and Mrs. Milton James, of Muncie. Mrs. E. L. Johnson is the Superintendent. Dr. Maria Haslet is the physician is charge.

It will thus be seen that the management and government are entirely in the hands of women, and there is not in the West, and perhaps not in the whole country, a similar institution that is better kept, in which there is better discipline or better order. It is an honor to the State, and an evidence of the ability of the women in charge to meet fully every requirement demanded by their positions.

REFORM SCHOOL FOR BOYS.

This institution is pleasantly situated near Plainfield, Hendricks county, twenty miles from the capital of the State. The buildings are substantial brick structures. Their erection was commenced in 1868, and additions have since been made almost annually.

They are well heated with hot air furnaces, stoves and grates. The ventilation, drainage and water supply are first class. The hygienic and sanitary surroundings are excellent. There are four hundred and twenty-eight boys in the institution, ranging in ages from ten to twenty years. Seven months in the year they are afforded school privileges, five hours each day. When not engaged in the school, they are employed learning trades or at work upon the farm.

Within the year there have been five deaths from the following diseases: Traumatic tetanus, purulent pleuro-pneumonia, pneumonia and phthisis. This is a very small ratio of mortality, and shows that the hygienic condition of the inmates is good and that they are well cared for. It is one of the model institutions of the State, and its management is one of which we may be proud. Prof. T. J. Charleton is the superintendent in charge, than whom no better could be found.

To the State Board of Health:

I have the honor to submit to you this, my report of the sanitary condition of the Indiana State Prison North:

The sanitary condition of this institution is excellent. There is one large sewer, five feet in diameter, composed of brick cemented inside, running directly through the grounds, and emptying into Lake Michigan, from which the prison is one and one-half miles distant. They also have an artesian well with a flow of several hundred gallons per minute, emptying into the head of said sewer, which keeps it perfectly clean and free from rubbish and stagnant water. The smaller sewers from the kitchen, waste-house and shops all lead into the main one, and are all well protected by stench traps. Great care is taken that nothing deleterious to health is allowed to accumulate in or around the prison. The cell-houses, two in number, are well ventilated, each cell being supplied with a ventilator. Perfect cleanliness is enforced in all departments; each convict is required to bathe once a week. As an evidence of the sanitary condition, I will state that they have not had a case of continued fever in the past eighteen months, and only five deaths in the past year, and those from diseases contracted before being admitted into the Institution.

The prisoners are furnished with plenty of good, substantial, well-cooked food and good clothing.

SAMUEL R. SEAWRIGHT, M. D.

REPORT OF A VISIT TO THE COUNTIES OF POSEY, VANDERBURGH, GIBSON, CLARK, FLOYD, HARRISON AND CRAWFORD.

DR. W. A. FRITSCH, EVANSVILLE.

Each member of the State Board of Health having been requested to visit certain places to make a sanitary survey of the same, in connection with the county, city and town health officers, I commenced my inspecting tour on the 29th of April, 1885, with a visit to Mt. Vernon, Posey County. Dr. D. C. Ramsey conducted me through the streets and alleys of the city. This officer and the city health officer, Dr. Pearse, had commenced already through printed placards to arouse the people to the necessity for a general cleaning up. But the advice of the two officers had not been followed by all, and there was much to do yet. There being very little sickness in Mt. Vernon at that time, the people therefore felt secure; but they should not forget the dire experience the town went through in the year 1873, when from its inhabitants, numbering at that time about 3,000, 500 persons were sick with cholera, and 82 persons died from it between the 7th of June and the 20th of September. Business was at a stand-still at that time, and all the people who could fled from the ill-fated town.

On the high river bank I saw several privies without vaults, and below in the river bottoms two bad-looking ponds in which the rain washes all the dirt and filth from above. The owners of the land had been, so far, contrary in removing these nuisances. The matter had been brought before the City Council, but on account of the mayor's death no action had been taken. The sanitary officers being the proper ones to decide whether these ponds are a nuisance, there should be no evasion from the verdict of the health officers. Several cases of typhoid fever, and a few deaths from this disease, which have occurred in that part of the town, should be a warning to the people that in the warm summer months these ponds would be a great and common danger to the inhabitants of Mt. Vernon.

Mt. Vernon being the county seat of Posey County, I intended to visit the Poor House, but to my surprise I learned that the same was located in the northern part of the county, near Poseyville, and I had to defer the visit for another occasion.

In Evansville, Vanderburgh County, the City Board of Health was active in inspecting yards, alleys, etc. I directed my attention, therefore, to other fields. I visited the following public and private institutions:

1. The St. Mary's Hospital. There were fifty patients in the house. The ventilation was good, and all the rooms and the beds were clean and in good order.

2. The City Hospital, owned by a private company, which has a contract with the United States Marine Department, and receives the sick mariners at the price of seventy-five cents per day. There were eleven patients in the house at the time of my visit, who were well treated.

These two institutions receive a monthly donation of one hundred dollars from the city of Evansville.

3. The Orphan Asylum. This is situated on a hill in the west end of the city. The substantial building was well ventilated and in good order. The forty-seven children in the house were all well, and that at a time when there were many cases of measles in the city.

4. Christian Home, a charitable institution for unfortunate girls. At the time of my visit there were twenty-five young women and ten infants in the house. The house was clean and the health of the inmates was, with a few exceptions, good. The city gives one hundred dollars a month to this institution.

5. The Little Sisters of the Poor is a Catholic institution, a home for old men and women. The house is small for so many people, but everything is kept so clean and nice that they had very little sickness so far, and the old people seemed to be happy.

6. The Poor House of Vanderburgh County. It is situated about six miles from the city of Evansville. The building is built in modern style, which still lacks perfection. The steam heating apparatus has been found inadequate during the last winter. There should be more bathing facilities for the inmates and the hospital of the infirmary needs a better outfit. The sick should have better nursing. If one or two good trained nurses were employed, the orders of the physicians would be more understandingly carried out. There were twenty-six incurably insane in the institution. The rooms and beds were clean and satisfactory; so was the food, which was furnished at the table. Annie Johns, an idiotic girl, fifteen years of age, attracted my attention in the institution. When brought here a year ago she had to be fed with a spoon and would not talk. Now she eats without assistance and can converse a little. The superintendent told me that she could be taught sewing. At my suggestion the County Commissioners sent her to the Knightstown Home for feeble-minded children, but she has since been returned by the superintendent of that institution, claiming that she was incapable of improvement. It is sad to see a girl like her, physically healthy, grow up in a poor house without an opportunity for improvement. If she only could be taught sewing, or some other easy work, she would know how to pass her time, and she might earn something for the

institution, where she has to stay for her lifetime. The Knightstown school seems to have too narrow a scope and should be made to enlarge its usefulness. The city of Evansville pays large sums of money to charitable institutions. The City Hospital, St. Mary's Hospital and Christian Home receive monthly each one hundred dollars, which makes for all these institutions three thousand six hundred dollars during the year. The City Board of Health costs the city about eight hundred and fifty dollars per year and the City Dispensary four hundred and twenty dollars, which aggregates an amount of four thousand eight hundred and seventy dollars. If we consider that the county of Vanderburgh pays for the same purposes good salaries to the county health officer, the county physician, and last year four thousand five hundred and thirty-six dollars and forty-eight cents for maintaining the inmates of the county poor house, it is apparent that much of this work could be better arranged and made less expensive to the city.

City councils only too often make allowances for charitable purposes without ever asking how the money is spent. When I, for instance, inquired of councilmen to whom the four hundred and twenty dollars appropriated for the City Dispensary were given, and how the money was spent, none of the gentlemen could give me an answer. I visited in Evansville, also, several factories where they employ children at ages varying from ten to twelve years, some of whom seem to have very frail constitutions and to be sufferers from anæmia. They should have schooling, and exercise in the open air. It is to be hoped that our next Legislature will pass a law forbidding the working in factories of children under fourteen years of age.

Sweezer Pond, on the right of Pigeon Creek, near its mouth, has been for many years a source of much complaint among the people in the neighborhood. It could very easily be drained into the creek if the outlet was not dammed off, contrary to Section 2067 of the statutes of Indiana, and a new supply was not furnished by the water works of Evansville. The pond is used to float logs in. The filth which drains from streets and out of gutters into the pond, which in the warm weather is stagnant, would naturally make the neighborhood an unhealthy one. In summer time I have frequently seen a green scum on the surface of the water, and still, in winter, ice is cut on this pond to be used in summer for culinary purposes. I have brought this matter before the city Board of Health. The members all agreed that the pond was a nuisance, but did not know how to abate it. They thought that to drain it in summer would cause trouble and make it more sickly. When I saw, a few months afterwards, the creek partly dried up by the sun, it was clear to me that Sweezer Pond could be drained without danger in summer. To postpone action from summer to fall, from fall to winter, might give the board no chance of doing something. In the fall the high water in the Ohio fills Pigeon Creek with back-water and hinders the drainage of the pond, and in winter it is covered with ice. And yet the necessity of abating this nuisance becomes from year to year more pressing on account of the progress in building houses, which increases the population of that part of the city.

In Princeton, the county seat of Gibson county, I spent half a day. The present health officer is Dr. J. P. Ward, but the former health officer, Dr. A. R. Burton, was doing the clerical work of the office. He was very kind in escorting me through the town, and visited with me the Poor House. It is a very poor building, indeed, and the condition would be greatly changed if the County Commissioners would look into the matter. As an excuse for the bad condition of the institution it was said that the building of a new and fine court house absorbed all means and relegated the poor-house question to the back ground. This ought not to be so. To keep the house in good condition, provide good blankets, etc., would not cost so very much. The County Commissioners might build the court house and do their duty toward the poor and sick also.

On the 27th of May I went to Jeffersonville, Clark County, where for some time there had been more or less typhoid fever. Complaint was made of one well particularly, because in that neighborhood there were many cases of typhoid fever. The water had been analyzed by Dr. Curtis and declared by him unfit for use. I found it of brackish taste, but most of the other wells are not much better. Jeffersonville is built on very low ground, partly on bottom land, and the people there use mostly well water, which is in Jeffersonville almost altogether surface. It is to be expected that where the city is thickly settled and the contents of many privies saturate the soil near the wells, the water may be easily contaminated, consequently unhealthy and unfit for use. It would undoubedly be better and more healthy to have cisterns, and use pure rain water instead of well water. Where there is a case of typhoid fever the drinking water may be suspected as the cause of it, and it should be examined in every case. If it contains organic matter it should not be used as drinking water. It is not necessary to send the water to a chemist. Every physician may by an easy, ready method convince himself and the people if the water contains organic matter. The water to be analyzed is put into a small porcelain dish and evaporated to dryness. If there is organic matter in the water, there will be a residue after evaporation, which will be brown to black in color, and smelling like burnt hair. Another method is to drop into the suspected water a solution of permanganate of potash (1 gr. to 1 oz. of distilled water). If the water is pure it keeps the red color; if not, it loses the red color, and precipitates a film at the bottom of the glass.

Some of the streets and alleys in Jeffersonville needed cleaning at the time of my visit very badly, were in a very filthy condition and dangerous to the health of the people who resided near them. With Dr. T. A. Graham, the health officer of Clark County, I visited the State prison near Jeffersonville. With the exception of the new cell house, the buildings are old and unhealthy. The old cell houses are damp, so much so that even the blankets in the cells feel damp. The hospital in the Penitentiary is built contrary to all the teachings of hygienic law. It is located over the wash-room, where the clothes for five hundred and eighty-one prisoners are washed. The fire and steam below and the noisy factories at the side make this hospital an unwholesome location. The drainage of the refuse matter and contents of the night buckets are objectionable, and should be changed. The surroundings outside of the prison grounds are in no good sanitary condition. On one side of the prison refuse matter is unloaded, and behind it the drainage is so much at fault that it is offensive to the smell. In 1884 the great flood of the Ohio River flooded one corner of the prison grounds. On October 16, 1885, I visited for a second time Jeffersonville and the Southern Prison, this time in company with Drs. S. R. Seawright, S. S. Boots and C. N. Metcalf. We found the streets and alleys of Jeffersonville in the same unhealthy condition, and the drainage of some streets and alleys made more difficult by the building of levees for the protection of the city against the flood. The condition of the State Prison was about the same as described. Preparations were made to remove the washing-room to some other place. The food of inmates was good and healthy. The Warden, without doubt, does his best under the present circumstances. It was the unanimous opinion of the members of the State Board, who were present, that the Southern Prison should be removed to a more healthy place. In New Albany, Floyd County, Dr. C. P. Cook, the present health officer, was my mentor. We visited together the Cornelia Orphan Asylum, and found it in a very good condition. The Poor House, near the city, was in a tolerably good condition, but the building for the incurably insane in the poor farm can not be approved. It is a very poor building, and the nurses for these unfortunate people should be of another type. The attendant for the insane men was not of sound mind himself, and it becomes at times necessary to lock him up. The females were waited upon by an inmate of the Poor House totally unfit for such a position. The insane were kept badly; one of the females was naked, with a blanket around her shoulders; she sat on the floor in one corner; a little straw in another corner was her sole bedding. The jail of Floyd County was in a bad condition, also; the sewer gas had free access out of the water closet to the jail, and made it unhealthy. It was, therefore, no wonder to find one of the prisoners sick with malaria. The Sheriff told me that he had spoken with the County Commissioners already, and that this nuisance should be remedied immediately.

Corydon, the old State capital, now the county seat of Harrison county, was next visited. The present health officer, Dr. J. E. Lawson, accompanied me to the Poor Farm. There are several miserable frame shanties on the farm, wherein the poor and sick are housed, the building for the incurably insane being the worst of all. Ten insane persons were confined there, five men and five women, some of whom were naked, and furnished with a little straw only for their bedding.

The man under whose care those unfortunates were placed was a large fellow, more fit to drive cattle than to care for the sick. The house was very unclean, the cellar dirty, and had an odor not unlike that of a stable. I must say here that Dr. J. E. Lawson has some time since complained of the condition of this farm, and the last grand jury of Harrison county condemned it also. I hope that my criticism will help to swell the chorus of the good people in the county and give them power to sweep these miserable structures out of existence and have a good house built in a proper place.

The Poor House in Crawford county, I am pleased to say, was in good order, but the situation of the house, between two hills near the creek, is a bad one. They have one insane man, but he did not have to be confined to a cell. On my way to Leavenworth I saw a school-house near the celebrated Wyandotte cave, which needed repairing. It was not fenced in, and had neither privy nor well. Visitors from other States to the cave might get a wrong idea of the school privileges of Indiana, and think we are living yet in the times of the Hoosier School Master. The Township Trustee should fix up the house and make its surroundings pleasant. In Leavenworth, the county seat, I called upon Dr. H. H. Setser, at that time the health officer of the county, and communicated to him the observation I had made while traveling through the county.

In concluding this report, I give my thanks to the health officers of the different counties for the assistance they have given me in my work.

SANITARY INSPECTION OF THE SOLDIERS' ORPHANS' HOME AND HOME FOR FEEBLE-MINDED CHILDREN.

BY S. S. BOOTS, M. D., GREENFIELD.

I compliance with instructions received from the Board I made a sanitary survey of the Soldiers' Orphans' Home and Home for Feeble-Minded Children, and I hereby present you my report of the same. The site and surroundings are all that might be required, but the building is not of itself altogether desirable, the most objectionable feature being a want of proper ventilation. The architect failed to provide for any ventilation except that which may be secured by the windows and doors, which is, to say the least, a very unsatisfactory mode, especially during midwinter. Another very serious objection is a wooden flue about two feet square extending from the cellar to the upper floors. This has openings into it from the halls on the different floors by hinged doors on the side of the flue. The object is to convey litter and the sweepings from the rooms on the upper floors to the cellar. In case of a fire this would afford a ready means of conveying the fire to the upper stories of the building with great rapidity. It also serves as an excellent conductor for any impure air that may be produced by decaying vegetables in the cellar.

The water privileges are good, and the water is of an excellent quality, that used for drinking and culinary purposes coming from a spring issuing from a hill-side one-fourth of a mile from the asylum, and is conveyed to it by pipes.

All connected with the Institution seemed to be busy cleaning and putting the building in the best possible condition. The floors, beds, bed-rooms, kitchen and dining-room, were neat and clean; in fact, almost everything connected with the Home was in good order. Superintendent Smith assured me that he was clearing away all rubbish that might yet be remaining and cleansing every part of the building.

In my examination of the sleeping apartments the number of beds was noted, also an estimation of the size of the rooms, all of which is made a part of this report. The first room examined was 21x21 feet with 12 foot ceiling, and contains 8 double beds. The two next were each 23x36, one containing 8 double, the other 13 single beds. Rooms 64 and 48 were each 16x28, one having 15, the other 16 single beds. Numbers 60 and 61 were each 13x28, with 13 and 14 single beds. Rooms number 50, 51, 52, 53 and 54 are 16x24; two of them have 7 and 8 double beds each, one 13, and the other 16 single beds each. Room 55 is 18x28, and contains 15 single beds. Another room is 20x24, and has 14 single beds.

I found three water closets that were out of repair; the flushing apparatus was broken. While they were not in a good condition to be used, one of them gave unmistakable evidence of recent use. My opinion is that all of the water closets are in need of repair, and that the plumbing in general should be overhauled by an expert and put in a good sanitary condition.

The room used as a nursery is too small and is so situated that the inmates are subject to great annoyance by noise from the halls. If any contagious disease was to break out among its inmates there is no provision for isolating them.

There are other small buildings remote from the main one that are not in use that could, with but little expense, be fitted for a nursery and hospital, which would give better accommodations to the sick, and would add that much room to the main building, a thing very desirable.

I would therefore recommend that this Board advise the Board of Trustees of the Home on the matter contained in this report.

SCHOOL HOUSES.

The law creating this Board places the sanitary care of school houses under its supervision. Being satisfied that many such buildings were in a bad hygienic condition, on August 15, preceding the opening of the fall term, we issued the following instructions to county health officers, directing that they place a copy of the same in the hands of the township trustees of their respective counties, they being the authorities having immediate charge of the construction and improvement of school houses and grounds.

We have every reason to believe that our instructions were carefully carried out, and thereby the sanitary conditions of the same were materially improved.

INDIANA STATE BOARD OF HEALTH,
Office of the Secretary.
Nos. 20 *and* 21 *Masonic Temple,*
Indianapolis, August 15, 1885.

To County Health Officers:

More than one-sixth of the population of our State will, during the next six months, spend six hours daily in the school house. This necessary confinement within the school room walls, coming as it does during the growing period of the body, and while it is the most susceptible to harmful influences, entails certain evils which have been too generally regarded as necessary accompaniments of school life. It is well known, however, to those who have studied these questions carefully, that most of the diseases incident to school life are in quite a high degree preventable, and that one of the first and most important requirements in guarding against these diseases is to have the school houses placed in the best sanitary condition possible before the beginning of the fall and winter terms of school.

To insure a favorable hygienic condition for the schools, the following essentials are demanded:

1. To clean out all sources of water supply, and place them in good condition and where houses have no supply of their own, to at once furnish one.
2. In the absence of a better system, to prepare the windows and transoms so that ventilation can be had without causing draughts of cold air to come in contact with the pupils.
3. To place the buildings in good repair, with tight floors, good roofs and underpinnings.
4. To see that the yard and grounds do not admit of standing water, and to prepare gravel or board walks to keep the children's feet out of the mud.
5. Suitable water closets for each of the sexes should be provided with every school house. They should be situated far enough away from the house to secure privacy, and not be a nuisance. They should be kept in good repair, cleaned and disinfected at least twice a month.
6. The rooms should be so warmed that all may be kept comfortable; stoves and furnaces safe and in good order.
7. The rooms should not be overcrowded. Not less than fourteen square feet of floor space and two hundred and fifteen cubic feet of breathing space should be allowed each pupil.
8. Blackboards should not be placed between the windows, and the surfaces of the boards should be a DEAD BLACK, not GLOSSY.
9. The light should, if possible, be admitted from the rear of the pupil; NEVER from the front.
10. Desks and seats of different heights should be furnished, to suit the sizes and ages of pupils.

In order to insure immediate action, there is attached to this a blank order, which you will please fill up and issue to the proper authorities, and cause its enforcement. By order of the Board.

C. N. METCALF, M. D.,
Secretary and Executive Officer.

. . . . Indiana, Aug. . . , 1885.

To . . . . ,
Trustee of . . . . , ... County, Ind.

You will please cause the foregoing order of the Indiana State Board of Health to be rigidly enforced in your jurisdiction.

By order of the . . . . County Board of Health.

. . . . M. D.,
Secretary and Executive Officer.

In another part of this report will be found an able article from the pen of Prof. D. N. Berg, on "Some of the Defects in our School System, and School Houses." The Professor for twenty years was a teacher, and for the past two years chief clerk in this department, thereby being well qualified to speak both as a teacher and sanitarian.

Another article also on "The Sanitary Conditions and Necessities of School Houses and School Life," by J. F. Hibberd, M. D., of Richmond, Ind. The Doctor is one of the leading sanitarians of the State, and an able writer, and has always taken a deep interest in the welfare of the public schools.

These articles deserve a careful reading, as they contain very many valuable suggestions of great interest to parents, teachers and those who have immediate charge of school buildings.

THE OPINION OF ATTORNEY GENERAL HORD.

In response to a request from Dr. E. S. Elder, Acting Secretary of the State Board, the Attorney General gave the following opinion concerning the powers and duties of county health boards:

"INDIANAPOLIS, March 10, 1885.

Dr. E. S. Elder, Secretary of the Indiana State Board of Health:

You have inclosed to me a copy of the official action of the town and county health officers of Washington County in reference to the Sanitary condition of the Court House, and in your communication you say that the matter has been referred to you for instructions. The report of the Board of Health states that "when the weather becomes warm, the offensive smells emanating from the accumulations of filth in the northeast corner of said Court House will breed malarial fevers, typhoid fevers, and the accumulations therein will be a prolific soil for any contagious diseases which may visit the country. The timbers in said public building are rotten, insecure and dangerous to passers-by and occupants of said building. The roof of said building is decayed, and is not in such a condition as to turn off falling water. The northeast corner of said house has been used for the disposition of excreta. This is in itself very dangerous to the health of the said community. The rain, percolating through the insecure roof of the building, has a tendency to create unwholesome air by rotting the manure and filth deposited therein. This renders the sanitary condition of said building alarmingly dangerous to health. The construction and ventilation of said Court House room is detrimental to the public health. The plastering of the ceiling of said Court House is loose, insecure and unsafe. The rooms provided for jury rooms are not ventilated and constructed so as to be in good hygienic condition for those who occupy them. We, therefore, as the Secretaries of the Boards of Health of Washington County, in justice to the public health of said county, and with a view to exterminating a great nuisance and make the community free from a cause which is dangerous to public health, and which would be the means of some contagious disease should such visit our community, recommend that said building be torn down and all of the filth and noisome deposits be removed therefrom."

The power to abate a nuisance is limited to the removal of that in which the nuisance consists, and when it is the wrongful use of property that constitutes the nuisance, the remedy is to stop such use and not tear down or demolish the building. (*Melch* v. *Stowel*, 2 Doug. Mich. 532; *Moody* v. *The Board*, 46 Barb. 659; Wood on Nuisance, pp. 44–5, sec. 33, pp. 514, 803, 804; 1 Diel. Mun. Corp., secs. 374, 378, 3d ed.; *Ely* v. *The Board*, 36 N. Y. 297.)

If the use of the building for improper and unlawful purposes created the nuisance, the improper use shall be abated and the buiding cleaned. If the timbers are rotten and the plastering insecure, the building would be subject to repairs and not destruction.

A Board of Health can not make regulations that are unreasonable, arbitrary and oppressive, and it becomes liable to an action for a wanton or unnecessary injury. (*Underwood* v. *Green*, 42 N. Y. 140; *Luegman* v. *Chicago*, 78 Ill. 405; 18 Cent. and Jour. 336; *Indianapolis* v. *Miller*, 27 Ind. 379; 1 Dill. Mun. Corp., secs. 95, 374, 379, 3d ed.)

There are times when prevailing plague and pestilence would justify extraordinary proceedings when necessary to arrest their growth and progress without waiting for the dilatory proceedings of courts, but when no such towering emergency exists, such unusual measures as the destruction of a building ought not to be adopted by a Board of Health, but the condemnation and abatement of the nuisance should be left to the action of the court. What is not a nuisance *per se* can not be abated by a Board of Health until it is adjudged to be so employed as to be inimical to public health or safety, or until the owner contravenes some ordinance prescribing the mode in which the property shall be kept, and thereby make it a nuisance. (*State* v. *Cadwallader*, 36 N. J. L. 283; *Rogers* v. *Barker*, 31 Barh. 447; 18 Cent. 8 Jour. 458, sec. 32.)

A court-house is not a nuisance *per se*. The question of nuisance or no nuisance depends upon the presence or absence of various extraneous facts and circumstances, and it is proper that the existence of these facts and circumstances, and the question of nuisance should be referred to a court of competent jurisdiction, instead of being determined by a Board of Health, and property summarily destroyed by its order without compensation to the owner. (*Rogers* v. *Barker*, 31 Back. 447; 23 Amer. R. 203; 18 Cent. L. Jour. 458, sec. 32.)

The Board of Health may promulgate and enforce such reasonable regulations for the preservation of the public health and the prevention of epidemics and contagious diseases as may be deemed advisable by them, and any person or officer of a corporation neglecting or refusing, after having been notified in writing to comply with the requirements of such regulations, shall be guilty of a misdemeanor, and upon conviction thereof, shall be fined. (R. S. 1881, sec. 4994.)

The statute declares, " Whatever is injurious to health, or indecent or offensive to the senses, or an obstruction to the free use of property, so as to essentially interfere with the comfortable enjoyment of life or property, is a nuisance and the subject of an action. Such action may be brought by any person whose property is injuriously affected, or whose personal enjoyment is lessened by the nuisance."

Where a proper case is made, the nuisance may be enjoined or abated and damages recovered therefor. (R. S. 1881, secs. 289, 290, 291.)

It is further provided that every person who shall erect or continue and maintain any public nuisance, to the injury of any part of the citizens of this State, shall be fined. (R. S. 1881, sec. 2066.)

After any person shall have been convicted of erecting, continuing or maintaining any public nuisance, the court may make it a part of its judgment that such nuisance be removed by the proper officer. (R. S. 1881, sec. 1859.)

In *Haag* v. *the Board*, 60 Ind. 511 it has been held that a county is subject to an action for keeping and maintaning a nuisance.

The statute provides that "such Commissioners shall cause a court house, jail and public offices for the Clerk, Recorder, Treasurer and Auditor, to be erected and furnished where the same has not been done. Shall keep all the public buildings of the county in repair, and such offices, if practicable, shall be made fireproof, and shall be occupied by such officers respectively. (R. S. 1881, sec. 5748.)

The statute prescribes the manner in which the Board of Commissioners shall proceed in the construction of a court house. (R. S. 1881, secs. 4243, 4244, 4245, 4246, 4247, 5749.)

The Judge of the court is authorized by statute to cause repairs to the court room. (R. S. 1881, sec. 1416.)

While it is the duty of the board to provide a court house, the kind of court house, its size, cost, and quality of material out of which it shall be constructed, must necessarily be left to the discretion of the board. (*The People* v. *La Salle County;* 84 Illinois, 303, 306. *Wehn* v. *Commissioners of Gage County;* 5 Nebraska, 494, 498.)

Such is the discretion with which the board is intrusted that some courts have held that mandamus will not lie to compel it to erect a court house, or, if the contract is let, to proceed with the erection thereof. (2 Dill Mun. Corp., sec. 835; *In re Black* 1, Ohio St. 30.)

In re Black, *supra*, the court held that while the court will not mandate a board to build a court house, yet when there was no such building the court would compel the board to provide suitable rooms for the court and county officers by renting.

In case of *the people* v. *La Salle Co.* 84 Ill., 303 to 306, the court says: "Had the County Board failed and refused to provide any kind of jail in which to confine prisoners, and it clearly appeared that the finances of the county were such as to justify the construction of a jail, we are inclined to the opinion that the duty enjoined by the statute might be enforced by mandamus, but such is not this case. While the provisions of the statute requiring the County Board to furnish a jail may be regarded as mandatory, which, under proper circumstances, the Board may be compelled to observe; yet the kind of jail to be provided must necessarily be left to the discretion of the Board. They have the sole power to determine the size, cost, and quality of the material of which it shall be constructed, and the various other matters in relation to the construction of the same; and so far as these various matters of discretion are concerned the courts have no power to interfere. * * * In this case the Board has provided a jail which has been in use in the county, as appears, for many years. Now the statute makes it the duty of the Board to provide and keep in repair a suitable court house and jail. The complaint here is that the jail is not suitable, but that is not a question for the courts. It is the province of the Board to determine whether the jail is suitable or not. If the court had the power to interfere in this case because the jail was not properly ventilated and was damp, and the room was so small and endangered the lives and health of the prisoners, upon the same principle, if the county should construct a jail at a cost of $30,000, and some taxpayer of the county was able to show that the cells were too small or the building insecure, or that money enough had not been expended to make the building as elegant as the wealth of the county demanded, in such case the court also would have to interfere. Such, however, would be a clear perversion of the statute. The Legislature has given the discretionary power to the Board of Supervisors, a body elected from each township in the county by the people, to determine the character and quality of the county buildings, and when that power has been exercised by the Board, it is no part of the duty of the courts to interfere by mandamus."

It has been held in this State that a mandate will lie to compel the Board to rebuild or repair a public bridge. (80 Ind. 517; 80 Ind. 478.)

But the courts have held that the liability of a county in connection with a court house is not the same as that applied to public bridges. (66 Amr. R., 236, 238, 239; 30 Minn. 96; 44 Amr. R. 185; 35 Amr. R. 151.)

I don't pass upon these questions, but merely suggest them, that the difficulties of the Board of Health in its proceeding to demolish a court house may be observed.

I might further suggest, without passing on the subject in this case, that in many cases it has been held that the general words of a statute do not affect a county in respect to its public buildings. It has been held that a court house is not subject to exaction or to a mechanics' lien, or to assessments for streets, etc. (*Commissioners of Parke County* v. *O'Conner*, 86 Ind. 531. *Lowe* v. *Board*, 94 Ind. 553; *Secrest* v. *Board of Commissioners of Delaware County*, decided January 30, 1885.) And it is a proper subject to consider whether the general terms of the Board of Health would authorize the demolition of a court house.

I have made these suggestions that it may be observed that some legal questions of importance may arise in connection with the proceeding of the Board of Health against the Washington County Court House, and that these questions, and all questions connected with proceeding, should be left to the action of some court of competent jurisdiction, not to the arbitrary judgment of a Board of Health.

Respectfully,

FRANCIS T. HORD,
Attorney-General of Indiana.

CHOLERA.

The following brief history of the epidemics of Asiatic cholera in this country will show that they were always preceded by the prevalence of the disease in Europe.

Epidemic of 1832. Prevailed in India in 1826 and 1827; in Russia in 1829; in Northern Europe and England in 1831, and in the United States in 1832.

Epidemic of 1849. Prevailed in Persia in 1846; in Russia in 1847; in Northern Europe, England and Ireland in 1848, and in the United States in 1849.

Epidemic of 1854. Prevailed in Russia, Northern Europe, and England in 1853, and in the United States in 1854.

Epidemic of 1866. Prevailed in Bombay in 1864; in Europe in 1865, and in the United States in 1866.

Epidemic of 1873. Prevailed in Persia in 1865–70; in Russia in 1869–72; in Austria-Hungary, North Germany and England from 1871 to 1873, and in the United States in 1873.

This Board, fearing that the disease would reach this country during the summer, on April 25, 1885, issued circulars setting forth that a visitation of cholera was anticipated, and even if it did not reach us, by placing the State in a good sanitary condition other maladies would be restricted. Health officers were instructed to look after the sources of potable water supply, and where they were found to be unwholesome or liable to pollution, to at once cause the abandonment of the same, water being the most common medium through which cholera spreads; hence the necessity of protecting the supply from contamination. Also, they were to make an immediate sanitary inspection of their respective localities and order the removal of all accumulations of filth and decaying animal and vegetable matter from the roads, streets, alleys, door yards, vacant and unoccupied lots, and see that all gutters and drains are kept open and clean, and that they are frequently flushed and disinfected. To see that all privy vaults, sinks, cess pools, foul cisterns, stagnant ponds, hog pens, foul stables, unwholesome cellars, manure piles, dirty yards or lots should be promptly and thoroughly cleaned and disinfected; that all rank vegetation along the streets, sidewalks and gutters of cities and towns, near inhabited dwellings, should be cut and removed or destroyed, and not left to rot and ferment under the influence of the rains and heat of summer. Their attention was especially called to the importance of compelling proprietors of *steamboats*, the owners of *hotels* and *boarding houses*, *landlords*, *railroad officials*, *school officials*, *city councils*, *town trustees*, and others in control of property, to thoroughly clean and disinfect their premises, and prepare suitable water closets for their employes, tenants and scholars, and to have them in good condition and frequently cleaned and disinfected.

During last spring and summer cholera prevailed in Spain in a most destructive form and extended into France and Italy. The virulency of the disease is shown by the number of its victims in the former country, which were as follows: From March 4 to September 28, inclusive, 267,689 cases and 98,929 deaths; per cent. of mortality, 39.9.

The disease continues in a modified degree in Spain and Italy and will probably remain in those countries during the winter in a more or less dormant state, ready to come forth with renewed vigor upon the approach of warm weather. This should warn us that we have not escaped an invasion of this pestilence, and that we must continue a strict enforcement of all hygienic measures and place our State in such a sanitary condition that if the disease reaches our country that its germs will not find proper soil within the borders of our State in which to propagate.

NATIONAL CONFERENCE OF THE STATE BOARDS OF HEALTH.

The members of the various State Boards of Health who were attending the meeting of the American Medical Association, held in Washington, D. C., May, 1884, held a preliminary meeting and organized the National Conference of State Boards of Health by the election of Erastus Brooks, of New York, Chairman, and J. N. McCormack, of Kentucky, Secretary. Eighteen States were represented. The object of the organization is to adopt a uniform plan of action to be followed in making sanitary investigations, as far as the laws of the respective States will permit, and obtain, if possible, a better knowledge of the work performed by the several boards. It was decided to hold meetings in the future at the same time and places with those of the American Public Health Association. Therefore, the first annual meeting of the conference was held in St. Louis, Mo., October 13, 1884. Twenty States, three cities and the Dominion of Canada were represented. Asiatic cholera having prevailed in France during the years 1883 and 1884, health boards throughout this country became duly alarmed on account of the threatened danger. Papers were read giving the conspicuous points in the history of the disease, showing that whenever it had obtained a firm footing in Europe, it sooner or later made its appearance in the United States; that it was an exotic disease and never made its presence here except by importation. The origin and nature of the disease and the necessary steps to be taken to prevent its entrance and dissemination were carefully considered and discussed. In order that the people might have an intelligent idea of the practical work necessary to avert this prospective danger, a committee, consisting of Drs. Baker, of Michigan; Rauch, of Illinois; Walcott, of Massachusetts; Bryce, of Ontario, Canada, and Herrick, of Louisiana, were appointed to draft a report on the best methods to be employed in excluding and restricting the disease.

REPORT OF THE COMMITTEE ON THE ORIGIN AND DISSEMINATION OF CHOLERA.

There are three factors essential to the prevalence of cholera in the country as an epidemic: (1) The importation of the disease by means of ships, more or less directly from its only place of origin in India; (2) local unsanitary conditions favorable to the reception and development of the disease; (3) persons sick with the disease in some of its stages, or things infected by such sick persons to carry it from place to place. These three factors naturally suggest the methods for combating the disease, for which there is needed practical work, international, national, inter-state, state and local. So far as relates to State and local boards of health, their organization and activities are greater than ever before; but it must be admitted that after cholera has been introduced into a country inland, quarantines are not easily and successfully maintained, although efforts in this direction are then advisable. In view of the threatened introduction of cholera into this country within the coming year, and the immense waste of life and property values which would thence result through derangements of commerce, trade and productive industries, it is the sense of this Conference that the General Government should maintain such a national health service as shall, by rigid inspection at the port of embarkation, ascertain the freedom from disease and infection of all persons and things from infected districts; and shall secure the surveillance of such persons and things while on shipboard, and, when necessary, their detention at quarantine stations on this side for treatment and disinfection.

OFFICIAL INSPECTION.

In view of the present threatening aspect of Asiatic cholera and the constant danger from other communicable diseases occuring at foreign ports having commercial relations with the United States, we urge upon Congress to provide for the appointment and maintenance of medical officers of health at all foreign ports where cholera, yellow fever, plague, small-pox or typhus exist, such officers being either accredited Consuls or attached to the Consulates. The duties of the officers shall be to give notice by telegraph, when practicable, of the existence or appearance of any of the above named diseases to some constituted authority in this country; to give notice of the departure of any vessel known or suspected to be infected for any port in the United States; and, whenever requested by the master of any vessel about to load or leave for this country, to inspect thoroughly such vessel in all parts, and also her cargo, her crew and passengers; to use such cleansing and disinfection as he may deem necessary, and to satisfy himself that all persons about to sail are free from dangerous communicable diseases, are not recently from infected places and are properly protected from small-pox, giving to her commander a certificate of the inspection and of all precautionary measures taken. And it shall be the duty of the central authority in this country to promptly transmit intelligence of the existence of the above mentioned diseases at foreign ports and places, and of the departure of dangerous vessels for the United States and Canada to all States and local health authorities in the country which may be interested in the same.

We further recommend in case of foreign ports which have no consular agents in this country or no telegraphic communication with this country, and which are liable to transmit pestilence through commercial intercourse, that one or more medical officers be chosen to visit such ports as often as may be deemed necessary by the central health authority in this country, so as to give trustworthy information of the health and sanitary condition of those places.

CANADIAN HEALTH ALLIANCE.

Inasmuch as the Dominion of Canada is equally interested with the United States in protecting itself and the United States from the importation of dangerous diseases, we suggest that Congress take such measures as will bring about concentrated action with the Dominion and the British Government, by which the Consuls of this country or of England at foreign ports shall examine and take such action as they may deem effective, and notify the authorities of such Government as has authority over any port to which any ship may sail in the United States or Canada, in order that such government may be in a position to take effective measures against the importation of these diseases.

We are gratified that the authorities of the Dominion of Canada and of the Province of Ontario have taken active steps toward protecting the people of Canada, and indirectly those of the United States, by the adoption of extensive quarantine regulations. We feel, however, that with those regulations regarding the landing of passengers from the mail steamers along the St. Lawrence, etc., further special regulations for the thorough disinfection of the baggage and effects of all passengers—cabin or steerage—as come from infected ports or places, should be carried out in a manner similar to that recommended by the National Board of Health. Believing that the importation of cholera into this country has usually attended the presence of emigrants from infected countries, we therefore recommend that all such emigrants be prevented from landing at our ports until such time as the danger of the introduction of cholera by them shall have passed. The inspection and quarantine service inaugurated by the National Board of Health, and set forth in the paper by Dr. Smart before the Conference (but which system is now inoperative for want of an appropriation by Congress), meets with our cordial approval. To enable these protective measures to be carried out, we recommend that Congress be urged in the strongest terms to legislate on this subject at an early date at its coming session, and to appropriate such funds as may be needful. The expenses incident to the work which has to be performed at foreign ports, and the establishment of refuge stations at points on our coast for the detention and treatment of infected vessels arriving from foreign ports, should undoubtedly be borne by the National Government, and not by individual States and municipalities, for the benefits accruing therefrom are general, and not restricted to localities, although some ports and cities on the coast may have a more immediate interest in the matter than others in the interior. It is probable, however, that this National protective work may not be sufficient.

LOCAL SAFEGUARDS.

It will undoubtedly delay and lessen the chances of invasion, but it may not prevent invasion; the poison of the disease is subtle, and may effect an entrance into the country at some unguarded point. The funds necessary to the stamping out of the disease in a particular locality, and to the prevention of its spread to other localities, might, in some instances, be borne by the municipality or State affected; but should the disease occur in a locality which has failed, or is unable to make provisions for the occurrence, its spread to others and States would be imminent. The want of means at the infected point would be disastrous to many others. Congress has recognized the necessity for aid to State and local boards of health under similar conditions in the case of yellow fever. In 1879 the sum of $500,000 was appropriated and placed at the disposal of the National Board of Health, and the records show that of this sum only $160,000 was employed in combating the epidemic of that year. We therefore recommend that the influence of this Conference be used with the view of having appropriated by the National Legislature the sum of $500,000 to be used, or as much thereof as may be needful in case of a cholera invasion, in stamping out the disease from the infected localities, and in preventing its spread from State to State.

The removal of local unsanitary conditions favorable to the development of cholera is the especial work of State and local boards of health. Much has been done already in some States, but much remains which should receive immediate attention. Where it can be done, State sanitary inspectors should be appointed to visit all towns and cities, especially those liable to the disease, to counsel with the local authorities as to the best methods of prevention. This work should be vigorously prosecuted before the disease reaches our shores.

The cause of cholera is contained in the discharges from persons affected with the disease, or in things infected by such discharges. Should the disease reach our shores, the first case, and after this the first case which reaches any given community, should be strictly isolated; all infected material from these and from any subsequent cases should be destroyed in such manner as to stamp out the disease.

Intelligent sanitary precautions beforehand and scientific disinfection and treatment in the presence of the disease should take the place of the necessary cruelties of a panic. In case any city or town is infected the same principles of isolation should, in general, be applied to the city as to the infected individual. Intercourse with other cities and places should be under sanitary supervision, substantially as set forth in the rules and regulations of the National Board of Health, respecting the inspection of travelers, disinfection of effects, vehicles, etc. Health officers and inspectors appointed by State or provincial boards of health, should, in addition to other sanitary work, see that the localities have set apart, erected or planned to be set apart or erected, structures which shall possess the sanitary requirements of an isolation hospital. But as regards all necessary work by local boards of health, most State and provincial boards of health have printed and issued documents which give ample instructions.

The report was adopted by the conference, and afterwards received the unanimous indorsement of the American Public Health Association. The work of the session being completed, an adjournment was made to Washington, D. C., Dec. 10, 1884.

In pursuance of the above adjournment, the Conference of State Boards of Health convened at Washington at the appointed time. There were represented twenty-two States, the principal cities of our country and the Dominion of Canada. The work of the convention was delegated to three committees as follows: Federal Relations, On the Work of State Boards, On the Work of Municipal Boards. Reports from the various health officers in attendance were then received, and a general discussion regarding the sanitary condition of their respective localities ensued. The Committee on the Work of the State Boards reported that the laws of the States are so diverse that it was difficult to formulate a system of uniform action. Each

State should be fully advised of the conditions prevailing at the ports of neighboring States through which disease might gain admission to its own cities.

In reference to inter-state communication it is essential that officers of State and Federal boards should promptly notify each other of any case of cholera occurring in its own domain. The report of the Committee on the Work of Municipal Boards was as follows:

1. That all surface wells should be closed at the earliest possible moment, and that great care should be taken that the water supply of all cities, towns and villages should be of undoubted purity.

2. That all privy vaults should be abolished where water closets can be supplied, and wherever the existence of such vaults is necessary that they should be rendered water tight in such a manner as to prevent the saturation not only of the ground surrounding them but also of the materials of which they are built, and that the contents of such vaults should be kept constantly disinfected, and removed to a proper place at frequent intervals.

3. That all stagnant ponds, when practicable, should be disinfected, and when possible the water removed by drainage or pumping, and the further accumulation prevented by filling with fresh earth or other material free from garbage or other filth.

4. That great care should be exercised to keep at all times clear and free from obstruction all sewers into which passes the refuse from dwellings, factories and other buildings, and that such examinations should be made as will detect imperfect plumbing in all buildings, and the defects should be immediately corrected. In this connection special attention is directed to the necessity for the thorough ventilation of all soil and waste pipes, and to the dangers connected with untrapped and unflushed soil, waste and overflow pipes.

5. That extraordinary care should be exercised in reference to all tenement and lodging houses, and, in general, all places where large numbers of human beings congregate; that no accumulation of garbage or other filth be permitted in cellars or yards; that frequent and thorough cleaning and whitewashing of such structures be required, and that householders should

frequently and thoroughly examine their yards, cellar, closets and other out-of-the-way places, to see that no filth of any kind has been deposited there.

6. That the food supply be vigorously watched, to exclude from the market all unwholesome meat, all milk adulterated or from diseased animals, and all unripe fruits and vegetables, and that cow stables be kept at all times clean, well whitewashed, and free from all excremental accumulations.

7. That all garbage, kitchen and household refuse should be promptly removed from dwellings, stores and other buildings to a proper place, where it may be destroyed by fire or otherwise disposed of in such manner as to occasion no nuisance.

8. That such material should never be used in the filling of lots, or be disposed of by throwing the same into streets or vacant property, where it may decompose and exhale offensive and deleterious gases.

9. That the authorities of all institutions, both public and private, and of individuals as well, be drawn to the great importance of maintaining a habit of personal cleanliness in the persons under their charge, as being one of the most efficient means of warding off an attack of cholera, or, if it has once appeared, of greatly reducing its virulence and fatality.

10. Should the cholera appear in any place in this country, the health authorities should have immediate notice of the first case, in order that prompt action may be taken for complete isolation and disinfection.

11. That all authorities of States, cities or villages be urged to adopt measures which will result in the amelioration of all conditions such as have been referred to in the foregoing propositions, with the warning that in the opinion of the conference such conditions, if permitted to continue, will greatly promote the spread of cholera when it comes, and with the assurance that if requisite measures are promptly taken to remove them, the disease will be less likely to attack a community so prepared, and if attacked, that such a community will be better able to cope with the disease and reduce its ravages to a minimum.

The Committee on Federal Relations reported a draft of a bill which contemplated the organization of a National Board of Health, to be composed of one representative from each State. The bill was submitted to the committees on Public Health of the Senate and House and approved by them.

It was introduced into the Senate where it reached its second reading; but owing to the press of business of that body, and the want of proper support, and being opposed by certain individuals who had personal schemes to further, it failed to pass. It is to be hoped that this or a similar bill will be passed by Congress in the near future.

FOURTH ANNUAL REPORT

OF THE

BUREAU OF VITAL AND SANITARY STATISTICS,

FOR THE

Year Ending September 30, 1885.

BY C. N. METCALF, M. D.,
Superintendent and Secretary of the Board.

Complete and reliable statistics are valuable in many ways and for many purposes. We regret to say that the following tables are not complete. Several causes have brought this about. In some instances, as has already been stated, the county health officers were too indifferent to attempt to collect statistics from those whose duty it is under the law to make reports. In counties where this is the case the returns are so incomplete that they are almost worthless. Where this carelessness exists among health officers, it is but reasonable to expect to find it among physicians.

The Tenth Census reports for the year 1880, 31,213 deaths in Indiana, which would fix the annual death rate at 15.78 per thousand. This Bureau collected for the first annual report (for nine months), 11,067 deaths; for the second annual report, 14,925 deaths; for the third annual report, 15,688 deaths, and for the fourth, or present report, 16,627 deaths. These results prove that if the number of deaths reported by the census is approximately correct, we have been unable to collect more than half of the number. Assuming that one-half of the deaths from the various causes are reported, i. e., that there were twice as many deaths from typhoid fever, diphtheria and scarlet fever as were reported, correct deductions could be made, but by reference to the following comparisions it will be seen that such is not the case, the number varying.

The census report give deaths from:

Consumption or phthisis, 1880 census report	3,735
Consumption or phthisis, our third annual report, 1884	2,132
Typhoid fever, 1880 census report	1,401
Typhoid fever, our third annual report	596
Diphtheria, 1880 census report	989
Diphtheria, our third annual report	239

The fact that more deaths occur from these diseases some years than others must also be taken into account. It may, however, be maintained that this excess of deaths from typhoid fever and diphtheria is due to the fact that in 1880 there were, outside of a few of the larger cities, no organized boards of health in our State, and no well-directed effort to prevent the spread of these diseases. This view of the case is not without much force and plausibility.

Another feature which detracts from their value is incorrect diagnosis. Dr. Billings, referring to reports from physicians, says: "While the results obtained from these physicians' returns are of interest and value, it must be constantly borne in mind that they were not derived solely from competent medical men, but from all those who choose to call themselves physicians. When a cause of death is reported as 'Tecis,' 'Spinalgitis,' 'Colory in Phantum,' 'Colirafontem,' 'Cholor Rhea Infantum,' 'Hasphmar,' 'New Money Fever,' 'No fisian tendin,' 'Struck in on the aire cells,' 'Yaller ganders of the Liver,' 'Unknowing,' 'Know Knowen Cause,' etc., it is evidently unsafe to lay too much stress on the scientific accuracy of the diagnosis by the same reporter in other cases, even although the spelling may be more nearly correct. While it is true, therefore, that the statistics are not as valuable as they ought to be, it must not, therefore, be inferred that the office of county health officer is not an important one. Their most important duties, that of sanitary oversight, causing at different seasons of the year a general cleaning up, arresting and stamping out contagious and infectious diseases, they have performed with commendable zeal and promptness." We entertain the hope that in the near future the Legislature will, by proper enactment, make it possible to procure complete returns from all parts of the State. Some changes have been made in the forms used for quarterly reports with the intention of simplifying the work, and we earnestly urge all concerned to enter the work with a full determination to improve upon that which has already been done.

We repeat what was said in a former report: "Until a burial permit is required in every case by law, and that permit based upon a return of death, we shall not be able to get complete returns." The value of the following tables can only be reached and appreciated after a series of years have elapsed and a similar report issued every year.

Then the State will be in possession of data relative not only to sickness and the various causes of death, but to many other factors which materially affect the people of the State. Upon the record of a birth, marriage or death often rests important testimony which is essential in a court of law to the securing of a judgment based upon justice. The want of past records in a consideration of important cases of to-day is in many instances keenly felt. It is with a view of providing for such exigences as well as for sanitary studies that the collection of these statistics is attempted.

TABLE NO. 1.

CLASS ONE—ZYMOTIC DISEASES.

Showing Total Number of Deaths Occurring in the State of Indiana, Males and Females, Arranged by Classes, Orders, Months, Sex and Color for the Year Ending September 30, 1885.

CLASS ONE—ZYMOTIC DISEASES.	1884.			1885.									Male.	Female.	White.	Colored.	Total.
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May.	June	July.	Aug.	Sept.					
ORDER ONE—MIASMATIC—																	
Anthrax	...	...	1	1	1	1	...	1	...	...	1	...	6	...	6	...	6
Cholera infantum	108	13	5	2	1	5	2	4	24	129	219	115	312	315	616	11	627
Cholera morbus	2	2	1	...	...	...	...	4	...	3	16	6	13	21	33	1	34
Congestive chill	4	3	1	2	4	1	2	5	3	4	5	5	16	23	38	1	39
Croup	32	54	30	42	37	14	10	10	3	15	8	16	148	123	259	12	271
Diarrhœa	17	13	10	9	3	6	7	5	10	29	26	28	97	66	157	6	163
Diphtheria	81	63	47	34	30	32	19	9	15	18	26	37	219	192	402	9	411
Dysentery	37	8	6	3	4	3	3	1	4	25	97	48	131	108	230	9	239
Entero-colitis	17	4	...	2	2	3	...	...	...	4	15	21	37	31	66	2	68
Erysipelas	5	3	7	4	5	7	3	2	3	4	6	3	30	22	51	1	52
Fever, bilious	1	...	...	1	...	...	...	...	...	3	4	2	5	6	10	1	11
Fever, catarrhal	2	...	4	4	13	7	3	2	2	1	...	...	27	11	38	...	38
Fever, cerebro-spinal	12	9	9	10	24	19	19	18	12	10	12	6	76	84	155	5	160
Fever, congestive	...	2	1	3	1	...	3	2	1	1	5	1	14	6	19	1	20
Fever, continued	...	...	1	...	...	...	1	...	...	...	...	...	2	...	1	1	2
Fever, intermittent	3	...	1	4	...	...	1	...	...	...	1	3	8	5	13	...	13
Fever, malarial	30	17	11	5	4	7	7	9	5	11	9	17	66	66	128	4	132
Fever, pernicious	1	1	1	1	...	4	...	3	...	2	4	5	13	9	22	...	22
Fever, puerperal	1	9	7	6	7	6	12	9	6	6	11	8	...	88	85	3	88
Fever, relapsing	...	...	...	...	1	...	...	...	...	...	...	...	1	...	1	...	1
Fever, remittent	15	5	3	3	2	3	3	4	3	2	4	3	24	26	46	4	50
Fever, scarlet	12	6	19	35	17	20	18	19	15	10	13	11	97	98	187	8	195
Fever, traumatic	...	...	...	1	...	...	...	...	...	...	...	...	...	1	1	...	1
Fever, typhoid	128	156	51	48	31	38	29	24	22	44	74	103	379	369	719	29	748
Fever, typho-malarial	36	29	10	14	7	7	11	5	6	12	14	25	96	80	167	9	176
Gangrene	2	2	1	2	3	4	...	4	6	3	3	3	24	9	33	...	33
Measles	2	3	4	10	25	24	41	14	7	4	2	5	60	81	138	3	141

Milk sickness	3	...	1	1	...	...	...	...	...	...	1	1	3	4	7	...	7
Mumps	...	...	...	...	...	1	...	...	...	...	...	...	1	...	1	...	1
Pertussis	6	4	4	1	4	4	6	5	3	12	18	9	33	43	75	1	76
Puerperal peritonitis	...	...	1	1	1	4	1	...	2	...	...	2	...	12	12	...	12
Puerperal septæmia	3	2	1	3	2	2	1	3	2	...	...	2	...	21	21	...	21
Pyæmia	4	1	6	...	...	...	6	3	2	8	4	3	18	19	36	1	37
Septæmia	6	4	4	6	8	8	6	5	4	7	7	6	21	50	67	4	71
Small-pox	7	2	1	2	...	...	...	...	...	...	...	...	6	6	11	1	12
Total	577	415	249	260	237	230	214	170	160	367	605	494	1983	1995	3851	127	3978
ORDER TWO—ENTHETIC—																	
Glanders	...	...	...	...	...	...	...	...	...	...	1	...	1	...	1	...	1
Syphilis, acquired	2	2	2	2	...	2	1	6	1	5	2	2	11	16	22	5	27
Syphilis, congenital	2	...	1	1	1	1	1	2	...	1	2	1	9	4	13	...	13
Total	4	2	3	3	1	3	2	8	1	6	5	3	21	20	36	5	41
ORDER THREE—DIETIC—																	
Delirium tremens	2	3	3	...	...	...	...	...	...	...	...	...	8	...	8	...	8
Eczema	...	...	1	1	...	...	...	...	...	2	...	...	3	1	4	...	4
Inanition	25	26	20	21	29	28	29	9	21	30	33	29	155	145	276	24	300
Intemperance	4	2	...	1	1	3	1	1	5	2	1	2	23	...	22	1	23
Purpura	...	1	...	1	1	...	...	1	3	1	...	2	6	4	10	...	10
Urticaria	...	...	...	1	...	...	...	...	...	..	...	...	1	...	1	...	1
Total	31	32	24	25	31	31	30	11	29	35	34	33	196	150	321	25	346
ORDER FOUR—PARASITIC—																	
Aptha	3	2	...	...	...	...	...	...	1	2	...	2	6	4	10	...	10
Total	3	2	...	...	...	...	...	...	1	2	...	2	6	4	10	..	10
Total Zymotic Diseases	615	451	276	288	269	264	246	189	191	410	644	532	2206	2169	4218	157	4375

TABLE No. 1—Continued.

CLASS TWO—CONSTITUTIONAL DISEASES.

Showing Total Number of Deaths Occurring in the State of Indiana, Males and Females, Arranged by Classes, Orders, Months, Sex and Color for the Year Ending September 30, 1885.

CLASS TWO—CONSTITUTIONAL DISEASES.	1884.			1885.										Male.	Female.	White.	Colored.	Total.
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.					
ORDER ONE—DIATHETIC—																	
Anæmia	2	1	2	2	5	4	4	4	4	9	5	1	10	33	42	1	43
Anasarca	...	...	1	1	...	1	1	...	...	...	...	...	1	3	4	...	4
Ascites	1	...	1	1	...	1	1	1	...	2	...	...	5	3	7	1	8
Cancer	6	6	8	10	13	13	13	10	6	17	13	10	48	77	123	2	125
Cancer, breast	2	2	...	1	3	...	...	1	...	3	2	3	1	16	17	...	17
Cancer, face	...	...	1	...	...	...	...	...	...	3	3	...	5	2	7	...	7
Cancer, liver	2	...	2	3	3	2	2	2	2	3	3	5	17	12	29	...	29
Cancer, rectum	...	...	...	...	1	1	...	...	...	...	...	1	2	1	3	...	3
Cancer, stomach	9	6	6	7	2	3	1	5	5	6	4	5	30	29	59	...	59
Cancer, uterus	3	2	1	3	5	2	4	2	1	4	3	1	...	31	29	2	31
Cancer, vertebra	1	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	1
Chlorosis	1	...	...	1	...	2	2	1	...	3	1	...	1	10	11	...	11
Dropsy	6	8	6	13	8	15	21	8	12	19	10	18	73	71	134	10	144
Goitre	...	...	...	...	1	...	...	...	...	...	1	...	...	2	2	...	2
Heart rheumatism	...	2	2	1	...	2	1	...	...	...	...	...	5	3	8	...	8
Leucocythaemia	1	1	...	1	...	3	3	5	1	...	...	1	6	10	16	...	16
Lymphadenoma	...	1	...	1	1	...	...	...	2	...	...	...	3	2	4	1	5
Rheumatism	3	2	6	7	1	9	9	5	3	6	6	1	30	28	55	3	58
Total	37	31	36	52	43	58	62	44	36	75	51	46	238	333	551	20	571

ORDER TWO—TUBERCULAR.																	
Abscess, psoas	2	1	. . .	. . .	1	. . .	1	. . .	1	1	. . .	. . .	2	5	7	. . .	7
Hydrocephalus	13	7	3	3	4	2	1	4	1	5	2	2	26	21	46	1	47
Meningitis, tub.	7	4	6	8	11	14	12	10	11	9	9	7	53	55	103	5	108
Morbus, coxarius.	. . .	. . .	. . .	. . .	. . .	1	. . .	. . .	1	. . .	. . .	. . .	1	1	2	. . .	2
Phthisis, pulmonalis	161	147	162	171	204	198	170	189	157	196	196	179	942	1188	1958	172	2130
Potts' disease.	. . .	1	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	1	. . .	1	. . .	1
Rachitis	. . .	. . .	. . .	. . .	1	. . .	. . .	1	. . .	. . .	. . .	. . .	. . .	2	. . .	2	2
Scrofula.	8	3	3	7	2	3	9	8	4	7	10	6	28	42	62	8	70
Tabes, mesenterica	6	4	2	1	2	2	3	2	3	4	2	4	19	16	30	5	35
Total	197	167	176	190	225	220	196	214	178	222	219	198	1072	1330	2209	193	2401
Total Constitutional Diseases	234	198	212	242	268	278	258	258	214	297	270	244	1310	1663	2760	213	2973

TABLE No. I—Continued.

CLASS THREE—LOCAL DISEASES.

Showing Total Number of Deaths Occurring in the State of Indiana, Males and Females, Arranged by Classes, Orders, Months, Sex and Color for the Year Ending September 30, 1885.

CLASS THREE—LOCAL DISEASES.	1884.			1885.									Male.	Female.	White.	Colored.	Total.
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.					
ORDER ONE—NERVOUS SYSTEM.																	
Apoplexy	21	17	12	19	16	8	18	14	18	26	23	17	130	79	204	5	209
Arachnitis	1	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	1
Brain, abscess	1	...	...	2	...	2	...	2	...	3	...	1	5	6	11	...	11
Brain, anæmia	...	...	...	...	...	1	1	...	...	...	...	...	1	1	2	...	2
Brain, congestion	27	15	12	17	21	15	14	8	10	25	28	17	116	93	199	10	209
Brain, disease	2	6	4	8	6	8	1	4	6	9	6	3	41	22	53	10	63
Brain, effusion	...	...	...	...	...	...	...	1	...	...	...	...	1	...	1	...	1
Brain, fever	3	1	1	2	5	1	1	1	4	5	3	8	16	19	34	1	35
Brain, hyperæmia	1	...	...	...	...	...	...	...	2	...	...	...	...	3	3	...	3
Brain, softening	3	1	2	5	8	6	3	7	3	6	6	4	38	16	53	1	54
Brain, tumor	...	...	1	...	...	...	...	...	...	...	1	1	2	1	3	...	3
Caries of spine	...	...	...	1	...	1	...	...	...	2	...	...	3	1	4	...	4
Cerebritis	16	4	6	10	13	12	11	19	13	18	10	12	70	74	137	7	144
Chorea	1	...	...	1	2	...	...	...	1	...	1	...	1	5	6	...	6
Convulsions	...	...	1	...	...	...	...	...	...	...	...	...	...	1	1	...	1
Convulsions, infantile	26	15	22	15	24	21	21	24	15	37	33	30	147	136	271	12	283
Epilepsy	2	1	3	3	2	4	2	4	...	4	...	2	16	11	27	...	27
Insanity	1	2	1	5	5	3	3	2	4	6	...	3	20	15	34	1	35
Locomotor ataxia	...	...	...	1	...	...	1	...	...	3	1	...	6	...	6	...	6
Meningitis	11	15	19	21	29	29	22	17	12	22	26	18	120	121	237	4	241
Meningitis, cerebral	9	13	6	6	5	7	12	15	7	15	6	10	57	54	104	7	111
Meningitis, spinal	1	1	1	...	...	2	4	1	1	5	6	3	13	12	23	2	25
Muscular atrophy	...	...	...	...	...	...	1	...	...	1	...	...	...	2	2	...	2
Myelitis	1	...	...	1	...	1	1	...	2	...	...	...	4	2	6	...	6
Neuralgia	...	...	2	...	1	1	...	1	1	...	...	...	1	5	6	...	6

Paralysis	28	22	31	30	25	22	28	27	19	30	27	27	154	162	307	9	316
Spina bifida	3	1	1	2	2	1	1	2	2	5	3	2	12	13	25	...	25
Spinal schlerosis	...	1	1	...	1	1	...	1	...	...	1	1	4	3	7	...	7
Spine, disease of	1	...	...	...	...	...	...	...	...	...	1	1	2	1	3	...	3
Tetanus	2	1	3	2	...	...	2	2	3	1	1	1	16	2	18	...	18
Trismus nascentium	2	...	1	1	3	...	4	1	...	3	2	1	12	6	17	1	18
Total	163	116	130	152	168	146	151	153	123	226	185	162	1009	866	1805	70	1875
ORDER TWO—CIRCULATORY—																	
Aneurism	...	1	1	...	...	...	...	...	...	1	1	1	4	1	5	...	5
Angina pectoris	3	3	1	2	3	5	1	2	6	5	3	2	19	17	35	1	36
Arteritis	...	...	...	1	1	...	...	...	...	...	...	...	1	1	2	...	2
Congestion	1	...	3	6	2	1	...	...	...	4	4	3	14	10	23	1	24
Embolism	1	1	...	3	...	2	1	...	...	...	...	...	3	5	8	...	8
Endo-carditis	1	1	1	4	1	4	...	3	...	...	2	1	8	10	17	1	18
Epistaxis	...	1	...	...	...	1	1	...	1	...	...	...	3	1	4	...	4
Heart, clot	...	1	...	2	...	...	...	...	...	1	...	...	1	3	4	...	4
Heart, dilatation	...	1	...	...	1	...	...	1	...	1	1	...	1	4	5	...	5
Heart, disease	23	11	19	34	33	30	35	18	23	45	31	22	182	142	306	18	324
Heart, fatty	...	3	2	...	3	1	2	2	1	2	1	1	12	6	17	1	18
Heart, hypertrophy	...	2	1	1	3	...	2	3	1	1	...	1	11	4	15	...	15
Heart, paralysis	2	3	4	6	1	5	2	3	2	4	5	1	20	18	38	...	38
Heart, val., disease of	7	10	12	12	8	6	5	4	4	4	3	2	38	39	76	1	77
Hemorrhage	...	1	...	2	2	...	1	...	...	6	2	4	8	10	17	1	18
Hydropericardium	4	3	4	3	3	4	...	2	1	2	1	1	11	17	28	...	28
Pericarditis	2	1	1	2	1	3	2	1	3	1	1	2	11	9	20	...	20
Phlebitis	...	...	...	...	1	1	...	...	...	...	...	...	...	2	2	...	2
Total	44	43	49	78	63	63	52	39	42	77	55	41	347	299	622	24	646
ORDER THREE—RESPIRATORY—																	
Apnea	...	...	...	1	...	...	2	...	1	...	...	...	2	2	4	...	4
Asthma	1	1	...	1	5	1	3	1	2	3	3	2	16	7	23	...	23
Bronchitis	12	23	19	30	40	41	41	24	5	11	11	9	152	114	255	11	266
Catarrh	1	1	...	2	...	...	2	4	3	2	...	1	9	7	16	...	16
Emphysema	...	1	...	1	...	...	2	...	2	...	...	...	4	2	5	1	6
Empyema	...	...	...	...	...	1	...	...	...	...	1	...	1	1	2	...	2
Hæmoptysis	3	2	...	3	2	...	5	2	2	7	2	4	16	16	27	5	32
Hydrothorax	...	1	...	...	...	3	2	...	1	2	1	...	5	5	10	...	10
Influenza	...	1	...	...	...	...	1	...	...	...	...	...	1	1	2	...	2
Laryngitis	4	2	3	6	8	5	5	3	2	1	2	2	22	21	42	1	43
Lungs, abscess	3	3	...	2	1	...	1	4	1	2	3	1	11	10	21	...	21
Lungs, congestion	5	10	11	12	19	15	20	13	7	14	10	12	86	62	144	4	148
Lungs, disease	...	2	1	...	...	5	...	...	...	2	1	1	7	5	11	1	12
Lungs, hepatization	...	...	...	...	...	...	...	1	...	...	...	2	3	...	3	...	3
Lungs, oedema	...	...	1	...	...	...	...	...	...	...	...	...	1	...	1	...	1

TABLE No. I—Class Three—Local Diseases—Continued.

CLASS THREE—LOCAL DISEASES.	1884.			1885.									Male.	Female.	White.	Colored.	Total.
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June	July.	Aug.	Sept.					
Order Three—Respiratory—Continued.																	
Pharyngitis	1	...	...	...	...	...	1	...	...	2	1	...	5	...	5	...	5
Pleuritis	...	...	2	2	1	2	3	3	...	...	3	...	9	7	15	1	16
Pneumonitis	34	69	102	188	201	190	161	88	45	61	24	54	670	547	1159	58	1217
Pneumonitis, broncho	...	1	2	1	6	7	...	...	...	...	...	...	5	12	15	2	17
Pneumonitis, pleuro	1	3	3	11	9	3	5	2	2	...	...	...	24	15	39	...	39
Pneumonitis, typho	2	1	3	5	11	13	12	1	2	4	1	3	32	26	56	2	58
Throat disease	1	...	...	3	3	...	...	...	...	...	...	...	4	3	7	...	7
Total	68	121	147	268	306	286	266	146	75	111	63	91	1085	863	1862	86	1948
Order Four—Digestive.																	
Abdomen, tumor	...	...	1	...	...	1	...	...	...	...	...	...	...	2	2	...	2
Bowels, abscess	...	...	...	...	...	...	...	...	...	1	...	...	...	1	1	...	1
Bowels, catarrh of	...	...	...	...	...	1	...	...	...	...	...	...	...	1	1	...	1
Bowels, congestion	2	6	8	4	3	4	3	1	1	9	12	3	31	25	53	3	56
Bowels, hemorrhage	3	4	1	3	2	1	1	...	...	1	2	2	6	14	20	...	20
Bowels, obstruction	8	6	...	5	...	3	3	4	1	3	4	5	26	16	41	1	42
Bowels, rupture	1	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	1
Bowels, ulceration	...	...	...	1	...	1	1	2	...	...	...	...	3	2	5	...	5
Colic	2	2	1	...	...	...	2	...	1	...	...	1	6	3	8	1	9
Colitis	2	1	...	1	1	...	...	...	...	...	2	2	5	4	9	...	9
Dyspepsia	4	2	...	4	3	...	1	1	1	2	2	3	12	11	22	1	23
Enteritis	22	12	7	7	14	8	15	9	21	26	32	34	113	94	201	6	207
Gall stones	...	...	...	1	1	...	1	1	...	2	...	1	5	2	7	...	7
Gastritis	11	7	7	7	7	7	4	8	3	13	3	8	41	44	81	4	85
Gastro-enteritis	3	2	3	4	1	5	3	6	1	5	8	5	23	23	45	1	46
Glossitis	...	...	...	1	...	...	...	...	...	...	...	...	...	1	1	...	1
Hematemesis	1	...	...	...	...	...	1	2	1	...	...	...	4	1	4	1	5
Hepatitis	3	2	1	5	2	...	8	3	4	3	8	7	22	24	43	3	46
Hernia	4	1	2	1	2	2	2	2	2	2	1	4	12	13	24	1	25
Intussusception	1	2	2	2	2	1	4	1	1	3	4	1	16	8	23	1	24
Jaundice	5	1	5	4	2	...	3	...	2	3	3	...	13	15	27	1	28
Liver, abscess	...	5	1	1	1	...	1	3	3	3	1	3	11	11	22	...	22
Liver, atrophy	...	...	...	...	1	...	1	1	1	...	1	...	1	4	5	...	5
Liver, cirrhosis	1	3	4	1	1	3	2	...	5	2	2	2	21	5	25	1	26
Liver, congestion	3	3	2	2	2	3	1	2	2	3	2	...	15	10	22	3	25

Liver, disease	2	3	1	4	3	2	2	7	6	...	4	3	20	17	36	1	37
Liver, fatty	...	...	2	...	...	...	...	...	...	...	...	...	2	...	2	...	2
Liver, hypertrophy	...	...	...	...	...	...	3	...	...	1	3	3	4	6	9	1	10
Liver, schlerosis	...	...	...	...	...	...	...	...	...	1	...	...	1	...	1	...	1
Mesenteric glands, disease of	...	...	...	1	...	...	...	...	...	...	...	...	...	1	1	...	1
Peritonitis	12	12	5	8	5	5	16	11	11	14	11	11	44	77	118	3	121
Rectum, disease of	...	1	...	...	...	1	...	...	...	...	...	...	...	2	2	...	2
Spleen, disease of	...	...	1	...	...	...	1	...	...	1	...	1	2	2	4	...	4
Stomach, catarrh of	1	...	...	2	3	...	...	...	...	...	2	1	5	4	9	...	9
Stomach, congestion of	3	2	1	3	2	4	3	3	4	5	8	2	22	18	40	...	40
Stomach, disease of	1	...	...	1	1	...	...	...	...	...	...	...	1	2	3	...	3
Stomach, hemorrhage	...	1	1	...	...	...	...	...	...	...	...	...	2	...	2	...	2
Stomach, ulceration	3	2	1	1	1	3	4	3	1	2	5	3	17	12	29	...	29
Stomatitis	...	...	...	...	...	...	...	2	...	2	...	2	3	8	6	...	6
Tonsilitis	3	4	...	2	2	...	1	...	...	2	1	2	10	7	17	...	17
Typhlitis	...	...	...	...	...	...	...	...	...	1	...	...	...	1	1	...	1
Total	101	84	57	76	62	55	87	72	72	110	121	109	520	486	973	33	1006
ORDER FIVE—URINARY.																	
Albuminuria	4	2	3	...	...	...	1	2	2	3	1	...	11	7	18	...	18
Calculus	1	...	...	...	...	...	...	...	...	...	2	...	3	...	3	...	3
Cystitis	7	3	4	5	4	4	3	9	...	6	5	3	48	5	51	2	53
Diabetes	6	2	6	3	8	3	5	4	3	3	2	5	31	19	49	1	50
Hæmaturia	...	...	1	...	...	...	...	1	...	...	...	1	2	1	3	...	3
Kidneys, disease of	3	1	3	3	2	...	3	...	1	2	3	4	14	11	25	...	25
Nephria	5	6	9	10	15	8	14	11	14	9	9	10	78	42	115	5	120
Nephritis	2	5	9	11	5	3	8	8	7	4	10	3	45	30	73	2	75
Prostatitis	...	...	1	...	...	...	1	...	...	1	...	1	4	...	4	...	4
Uraemia	4	3	6	3	5	5	4	7	4	4	2	3	29	21	48	2	50
Urethra, stricture of	...	1	...	...	...	...	...	...	...	1	...	...	2	...	2	...	2
Urine, retention of	1	...	1	...	...	...	...	...	...	...	1	...	3	...	3	...	3
Urine, suppression of	...	1	...	...	...	...	...	...	...	1	...	...	1	1	2	...	2
Total	33	24	43	35	39	23	39	42	31	34	35	30	271	137	396	12	408
ORDER SIX—GENERATIVE.																	
Metritis	1	3	...	3	1	1	1	2	2	2	3	1	...	20	20	...	20
Ovarian tumor	...	1	1	1	...	...	1	3	...	1	2	1	...	11	10	1	11
Ovaritis	...	...	...	...	1	1	1	...	...	...		...	...	3	3	...	3
Uterus, disease of	...	2	...	...	...	...	1	...	...	...	...	...	...	3	3	...	3
Uterus, rupture of	...	1	...	...	...	1	...	...	...	...	...	...	...	2	2	...	2
Uterus, tumor of	...	1	...	1	...	...	...	...	...	...	...	...	...	2	2	...	2
Total	1	8	1	5	2	3	4	5	2	3	5	2	...	41	40	1	41

TABLE No. I—CLASS THREE—LOCAL DISEASES—Continued.

CLASS THREE—LOCAL DISEASES.	1884.			1885.									Male.	Female.	White.	Colored.	Total.
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June	July.	Aug.	Sept.					
ORDER SEVEN—OSSEOUS AND LOCOMOTARY.																	
Ostitis	...	...	...	...	1	...	...	...	...	...	...	...	1	...	1	...	1
Total	...	...	...	...	1	...	...	...	...	...	...	...	1	...	1	...	1
ORDER EIGHT—INTEGUMENTARY.																	
Abscess	3	2	2	..	2	1	2	...	...	4	...	1	10	7	16	1	17
Cellulitis	...	1	...	...	...	...	1	...	...	...	...	...	...	2	2	...	2
Lupus	1	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	1
Total	4	3	2	..	2	1	3	...	...	4	...	1	11	9	19	1	20
ORDER NINE—MISCELLANEOUS.																	
Otitis	...	...	...	1	1	...	1	...	...	...	...	...	2	1	3	...	3
Rhinitis	...	1	...	...	...	...	...	...	...	...	...	...	1	...	1	...	1
Tumor	1	2	1	1	1	...	..	1	2	4	2	..	9	6	15	...	15
Total	1	3	1	2	2	...	1	1	2	4	2	...	12	7	19	...	19
Total Local Diseases	415	402	430	616	645	577	603	458	347	569	466	436	3256	2708	5737	227	5964

TABLE No. I—Continued.

CLASS FOUR—DEVELOPMENTAL DISEASES.

Showing Total Number of Deaths Occurring in the State of Indiana, Males and Females, Arranged by Classes, Orders, Months, Sex and Color for the Year Ending September 30, 1885.

CLASS FOUR—DEVELOPMENTAL DISEASES.	1884.			1885.										Male.	Female.	White.	Colored.	Total.
	Oct.	Nov.	Dec.	Jan.	Feb.	Mch.	Apr.	May	June	July	Aug.	Sept.					
Order One—Children.																	
Atelectasis	...	1	...	...	2	...	...	1	1	2	...	...	5	2	7	...	7
Birth, premature	22	10	14	26	32	23	21	23	29	23	21	17	153	108	251	10	261
Childbirth, accident	1	...	...	1	3	...	2	...	...	...	3	1	8	3	11	...	11
Craniotomy	...	...	...	...	...	...	...	1	...	1	1	...	2	1	3	...	3
Cyanosis	5	3	4	5	11	6	9	4	3	5	5	3	42	21	62	1	63
Debility, infantile	2	3	1	6	5	3	4	2	1	3	4	3	20	17	35	2	37
Dentition	4	...	1	...	1	3	...	...	...	1	...	1	9	2	11	...	11
Malformation	3	2	1	1	1	...	4	2	3	2	...	2	10	11	21	...	21
Malnutrition	3	...	1	1	1	...	...	5	1	2	...	2	13	3	16	...	16
Nursing sore mouth	...	...	...	...	...	...	1	...	...	...	...	...	...	1	1	...	1
Prolapsis funis	...	...	...	...	...	2	...	...	...	...	...	...	...	2	2	...	2
Umbilical hemorrhage	1	...	...	1	...	2	2	2	...	...	...	1	6	3	9	...	9
Total	41	19	22	41	56	39	43	40	38	39	34	30	268	174	429	13	442
Order Two—Women.																	
Amenorrhœa	...	...	...	...	...	...	...	...	...	...	1	...	...	1	1	...	1
Cæsarean section	...	...	...	...	...	...	...	...	...	...	...	1	...	1	1	...	1
Climacteria	...	...	...	...	...	1	...	...	...	...	...	...	...	1	1	...	1
Ovariotomy	...	...	...	...	...	...	...	...	...	...	1	...	...	1	1	...	1

TABLE No. I—Class Four—Developmental Diseases—Continued.

CLASS FOUR—DEVELOPMENTAL DISEASES.	1884.			1884.															
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May.	June	July.	Aug.	Sept.	Male.	Female.	White.	Colored.	Total.
ORDER TWO—WOMEN—Continued.																	
Parturition	1	1	...	2	3	2	4	...	1	...	4	3	...	21	21	...	21
Phlegmatia dolens	...	...	...	...	...	...	1	...	...	...	...	...	...	1	1	...	1
Placenta previa	...	...	...	...	...	...	1	2	...	...	1	...	...	4	4	...	4
Post partum hemorrhage	1	...	1	1	1	1	1	...	...	...	...	...	...	6	6	...	6
Puerperal eclampsia	2	1	5	4	3	5	3	4	2	8	7	1	...	45	43	2	45
Uterine hemorrhage	...	2	...	...	1	...	1	1	1	1	1	...	...	8	8	...	8
Total	4	4	6	7	8	9	11	7	4	9	15	5	...	89	87	2	89
ORDER THREE—OLD AGE.	20	27	31	46	41	25	26	41	27	29	46	27	172	214	366	20	386
Total	20	27	31	46	41	25	26	41	27	29	46	27	172	214	366	20	386
ORDER FOUR—NUTRITION.																	
Asthenia	...	5	2	...	2	...	1	1	...	...	...	1	5	7	12	...	12
Debility	10	16	7	11	15	11	15	14	16	15	15	6	76	75	142	9	151
Exhaustion	5	3	2	1	4	4	3	5	4	5	2	6	22	22	43	1	44
Marasmus	6	6	2	3	4	5	4	1	3	3	10	8	36	19	53	2	55
Total	21	30	13	15	25	20	23	21	23	23	27	21	159	123	250	12	262
Total Developmental Diseases	86	80	72	109	130	93	103	109	92	100	122	83	579	600	1132	47	1179

TABLE No. I—Continued.

CLASS FIVE—VIOLENCE, ACCIDENTS AND NEGLIGENCE.

Showing Total Number of Deaths Occurring in the State of Indiana, Males and Females, arranged by Classes, Orders, Months, Sex and Color for the Year Ending September 30, 1885.

CLASS FIVE—ACCIDENTS, NEGLIGENCE AND VIOLENCE.	1884.			1885.									Males.	Females.	White.	Colored.	Total.
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.					
ORDER ONE—ACCIDENTS AND NEGLIGENCE.																	
Abortion	...	...	...	...	...	...	...	1	...	2	...	1	...	4	4	...	4
Accident	22	9	7	8	9	12	11	17	15	20	20	19	133	36	156	13	169
Asphyxia	6	6	4	...	4	2	3	1	1	4	1	4	17	19	35	1	36
Boiler explosion	...	...	2	7	1	1	...	...	...	...	...	...	11	...	11	...	11
Brain concussion	1	...	...	1	1	...	...	1	1	4	1	2	11	1	12	...	12
Burn	5	7	5	4	5	7	8	4	2	2	1	1	16	35	48	3	51
Buzz saw	...	...	...	...	...	...	...	...	...	...	...	1	1	...	1	...	1
Choking	1	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	1
Coal mine	...	...	...	1	...	...	...	...	...	...	...	...	1	...	1	...	1
Drowning	...	4	...	5	3	1	4	9	7	14	12	3	52	10	58	4	62
Exposure to cold	...	1	...	2	1	...	2	...	...	...	...	...	6	...	6	...	6
Fall	2	3	3	1	...	3	2	2	...	3	2	1	13	9	22	...	22
Falling log	...	...	...	...	...	...	...	...	1	...	...	...	1	...	1	...	1
Falling tree	...	...	1	1	1	...	...	1	...	...	...	...	4	...	4	...	4
Fracture of femur	2	...	...	4	1	...	...	1	...	2	1	...	3	8	11	...	11
Fracture of hip	...	...	1	...	...	...	...	...	...	...	...	...	...	1	1	...	1
Fracture of neck	...	...	...	2	...	...	...	...	1	...	...	...	3	...	3	...	3
Fracture of skull	...	...	...	...	1	1	1	...	...	...	1	...	4	...	4	...	4
Fracture of thigh	...	...	...	...	...	1	...	...	...	...	...	...	...	1	1	...	1
Injury to head	...	...	2	...	...	...	...	...	...	...	...	...	1	1	2	...	2

TABLE No. I—CLASS FIVE—VIOLENCE, ACCIDENTS AND NEGLIGENCE—Continued.

CLASS FIVE—ACCIDENTS, NEGLIGENCE AND VIOLENCE.	1884.			1885.												Males.	Females.	White.	Colored.	Total.
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June	July.	Aug.	Sept.					
ORDER ONE—ACCIDENTS, ETC.—Continued.																	
Insolation	...	...	...	...	...	...	...	...	1	1	...	1	3	...	3	...	3
Kicked by a horse	...	...	...	...	...	...	...	...	...	...	1	...	1	...	1	...	1
Kicked by a mule	1	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	1
Laudanum	...	...	...	...	1	...	...	...	...	...	...	...	...	1	1	...	1
Lightning	...	...	...	...	...	...	...	1	...	4	3	...	5	3	8	...	8
Morphine	...	...	1	...	1	...	...	1	1	1	2	1	4	4	8	...	8
Opium	...	1	...	...	...	...	1	...	...	1	1	...	2	2	4	...	4
Poison	...	3	1	1	2	1	1	2	2	2	2	1	13	5	17	1	18
Railroad	8	11	4	5	5	2	4	4	6	19	19	16	95	8	103	...	103
Runaway team	...	...	...	1	1	...	...	...	...	...	...	...	1	1	2	...	2
Scald	2	...	1	1	1	...	2	...	...	1	2	2	7	5	12	...	12
Shock	1	1	...	...	...	...	...	...	...	1	1	...	2	2	4	...	4
Shooting	8	5	6	7	2	4	...	3	6	4	8	5	55	3	53	5	58
Strangulation	...	1	...	...	...	...	...	1	...	...	...	...	1	1	2	...	2
Strychnine	...	...	...	...	1	...	...	...	...	...	...	...	1	...	1	...	1
Suffocation	1	2	...	...	1	...	2	1	...	2	...	2	8	3	9	2	11
Total	60	54	38	51	42	35	41	50	44	87	78	60	477	163	611	29	640
ORDER TWO—JUDICIAL EXECUTION.																	
Hanging	1	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	1
Total	1	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	1
ORDER THREE—HOMICIDE.																	
Homicide	2	2	1	4	1	3	2	4	1	3	2	...	19	6	23	2	25
Total	2	2	1	4	1	3	2	4	1	3	2	...	19	6	23	2	25
ORDER FOUR—SUICIDE.																	
Arsenic	...	...	...	1	...	...	...	...	...	...	...	...	1	...	1	...	1
Drowning	...	...	...	...	...	...	...	2	...	3	...	...	4	1	4	1	5
Hanging	1	2	1	2	5	1	...	...	3	1	1	1	15	3	17	1	18
Laudanum	...	1	...	...	...	...	...	...	...	...	...	...	...	1	1	...	1

Morphine	...	...	...	...	...	...	...	...	...	1	...	4	4	2	6	...	6
Poison	...	...	...	...	...	...	...	3	1	...	...	...	4	...	4	...	4
Shooting	1	...	...	...	1	2	1	1	...	2	1	1	9	...	9	...	9
Strychnine	...	1	1	...	...	...	...	...	...	...	...	...	...	2	2	...	2
Suicide	8	2	6	5	5	1	4	5	7	10	6	5	47	17	64	...	64
Total	10	6	8	9	10	4	5	11	11	17	8	11	84	26	108	2	110
Total accidents, violence and negligence	73	62	47	64	53	42	48	65	56	107	88	71	581	195	743	33	776
Unknown	31	24	19	28	27	35	22	22	15	40	31	42	183	153	319	17	336
Total	31	24	19	28	27	35	22	22	15	40	31	42	183	153	319	17	336
RECAPITULATION.																	
Zymotic diseases	615	451	276	288	269	264	246	189	191	410	644	532	2206	2169	4218	157	4375
Constitutional diseases	234	198	212	242	268	278	258	258	214	297	270	244	1310	1663	2760	213	2973
Local diseases	415	402	430	616	645	577	603	458	347	569	466	436	3256	2708	5737	227	5964
Developmental diseases	86	80	72	109	130	93	103	109	92	100	122	83	579	600	1132	47	1179
Accidents, negligence and violence	73	62	47	64	53	42	48	65	56	107	88	71	581	195	743	33	776
Unknown	31	24	19	28	27	35	22	22	15	40	31	42	183	153	319	17	336
Total deaths from all causes	1454	1217	1056	1347	1392	1289	1280	1101	915	1523	1621	1408	8115	7488	14909	694	15603*

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* Still-births not included.

ZYMOTIC DISEASES.

The total number of deaths registered from this class of diseases in 1882 for nine months was 3,200; in 1883, 3,835; in 1884, 3,950, and in 1885, 4,375, or 423 more than during any previous year, but the number of deaths reported the past year, from all causes, shows an increase in the total mortality, but the deaths from zymotic diseases, compared with that from all causes, is less than in 1884, being 26.31 to the total mortality.

Below we present a comparative statement, showing the per cent. of mortality in the State during the past three years from nine principal zymotic diseases:

	1883.		1884.		1885.	
	Per cent. to total mortality from Zymotic Diseases.	Per cent. to total mortality from all causes.	Per cent. to total mortality from Zymotic Diseases.	Per cent. to total mortality from all causes.	Per cent. to total mortality from Zymotic Diseases.	Per cent. to total mortality from all causes.
Cholera infantum. .	13.55	3.49	16.48	4.14	14.33	3.77
Croup	5.26	1.35	4.68	1.17	6.19	1.62
Diphtheria	8.05	2.07	6.05	1.52	9.39	2.47
Dysentery	4.14	1.06	5.62	1.41	5.46	1.43
Fever, malarial. . .	9.54	2.36	7.49	1.88	6.76	1.78
Fever, scarlet	2.97	.76	4.50	1.13	4.45	1.17
Fever, typhoid . . .	16.01	4.11	15.08	3.79	17.09	4.50
Fever, typho-mala'l	2.89	.74	3.97	1.00	4.02	1.05
Small-pox.	5.55	1.42	2.53	.63	.27	.07

CHOLERA INFANTUM.

The total number of deaths reported from this disease within the year was 627; 73.84 of the whole number died during the months of July, August and September, 71.92 of whom had not completed the first year of life.

This would seem to be a sad commentary on the mothers of our State, who, either through ignorance or negligence, allow their offspring to perish from a disease so easily prevented by the observance of a few hygienic laws.

Improper feeding of infants is the cause of the greater proportion of cases. Too many mothers in this progressive period look upon it as beneath their dignity to nurse their children, considering that it is not *recherche*, and that the little ones in drawing the liquid of life from nature's fountains, whence God intended they should derive nourishment during their first years of life, would destroy the rotundity of these organs and render them unshapely. The poor child in the morning of life is turned over to the tender mercies of a nurse, who has only a mercenary interest in its welfare. If it be a wet nurse, it is more than probable that no effort has been made to discover hereditary tendencies. Her system may be saturated with the seeds of consumption, scrofula, or syphilis, just ready to develope into unmistakable disease, and not a question has been asked regarding her previous history. If the child is not nourished through the agency of a wet nurse, it is too frequently the case that it is fed with the milk from a cow diseased with tubercle, or cancer, or else upon some one of the numerous infant foods "sold by all druggists," or given food only fit for the stomach of an adult. All of which are abominations when compared with the mother's milk. Mothers should always nurse their infants unless physically incapacitated. Clothing and cleanliness of the babe are equally neglected, and pure fresh air and sunlight to develope its growth is seldom considered.

These are a few of the causes which lead to the development of this destructive disease, which carries so many human beings to an early grave. How can the mothers be educated on the importance of observing hygienic laws and the sanitary care of their children except through the instrumentality of our physicians?

In another part of this report we publish an exhaustive treatise on "Cholera Infantum and the Sanitary Care of Infants," by William A. Fritsch, of Evansville, a member of this Board. We invite especial attention to this article, because it was prepared after a careful study of every phase of the subject.

CROUP AND DIPHTHERIA.

It will be seen by a glance at the above table that diphtheria and true or membraneous croup maintain a relative ratio in the increased and decreased mortality of each. This would seem to sustain the theory of those who hold that they are one and the same disease, and that the same sanitary precautions should be observed in the treatment of both.

DIPHTHERIA.

Within the year there were reported 1,359 cases, of which 411 were fatal, an increase over the previous year of 172. We are satisfied after reviewing the special reports made by county health officers, that many cases are reported as diphtheria which, in fact, are follicular pharyngitis. Many physicians make the grave mistake of calling all cases of sore throat, accompanied by follicular exudation, diphtheria. By referring to the statistical tables in this report, it will be seen that children are particularly the victims of this disease. The youth of our country seem to be especially susceptible to the influence of its subtle poison.

It is an epidemic disease, both contagious and infectious, with a special material cause; probably a miasm depending upon certain conditions of filth for its origin, as yet undefined, and known only by its effects. The cause of the disease appears to require auxiliaries to promote its spread. Like many other epidemic diseases, its prevalence depends on certain conditions of soil and air. As moisture undoubtedly aids its spread and increases its malignancy, being more fatal in neighborhoods that are damp and chilly, and its dissemination being assisted by filthy water and contaminated air, and as it prevails in all climates and in all seasons (and hence affects alike persons in all stations of life), we believe poor ventilation, defective sewerage, the presence of decaying animal and vegetable matter, and other unsanitary conditions have much to do with the origin and spread of the malady, or, in other words, that its propagation depends largely on local unhygienic conditions and surroundings, and that its spread and destructiveness are increased by the same. The disease prevails "with intensity in confined centers, as a small village, a crowded school, a numerous family, inflicting therein often a terrible loss in proportion to the numbers attacked; a sort of domestic pestilence." Our reports show that the preponderance of deaths were in the thickly populated counties. Each case is an infectious center from which the disease may spread; physicians, parents and all others interested in the afflicted and the health of others, should so regard it and make use of every available means to prevent its dissemination. A thorough sanitary inspection of the house and its immediate surroundings should at once be made to determine the cause of the outbreak. Every case should be isolated in a room well ventilated, and free from drafts of air, and separated as much as possible from the rest of the house. No more members of the family should communicate with the sufferer than is strictly necessary for the proper care of the same. The room should be cleared of all carpets, drapery and all other materials likely to retain the germs of the disease. The discharges from the mouth, throat and nose are exceedingly dangerous and liable to communicate the disease, and should be received into a vessel containing a solution of chloride of lime, or some other reliable disinfectant. The discharges from the kidneys and bowels should be looked upon as dangerous, and should be treated in a like manner. Small pieces of rags should be substituted for handkerchiefs and burned immediately after being used. All articles of clothing, bedding, etc., should be disinfected before being removed from the sick room. The nurses should be as few as possible, and should not unnecessarily communicate with other persons, and should keep themselves and patients clean. Their clothing should be such as can be readily washed, and when removed should be immediately placed in boiling water. Food left uneaten should never be removed to a place where it will be liable to communicate the disease to others. The body of a person who has died from this disease should be wrapped with a sheet saturated with a disinfecting solution (one drachm of corrosive sublimate to a gallon of water, or one-half pound chloride of zinc to the gallon of water), and tightly sealed in a coffin before being removed for burial, which should be as soon as possible after death.

Funerals of persons who have died from this malady should always be private, and under no circumstances should a public one be tolerated, as the emanations from the body are extremely poisonous and dangerous. We have learned with regret of a public burial within the year of a person who died from diphtheria in a city where we would look for sufficient intelligence among the physicians to instruct the people that such a procedure was not only endangering the lives of those who attended the same, but the lives of those with whom they might come in contact afterward. County health officers have received instructions to exercise the utmost diligence in preventing such public demonstrations; also to institute prompt and vigorous sanitary measures to prevent its spread wherever it makes its appearance. We believe the well-directed efforts put forth by these officers in many instances succeeded in arresting the spread of the disease and saved many lives.

The following reports from the health officers of the State will be found to be valuable and interesting:

INDIANA STATE BOARD OF HEALTH.

Secretary's Office, 20 *aud* 21 *Masonic Temple, Indianapolis.*

REPORT ON DIPHTHERIA,

By..M. D.,

..................................Ind.

DEAR DOCTOR:

Since September 30, 1884, the Board of Health of your county has reported......deaths from diphtheria having occurred in the county. Recognizing this disease as a zymotic one, belonging to the preventable class, and largely due to unhygienic influences, in order to more completely protect the public against future outbreaks of this malady, I am anxious to ascertain all the facts in connection with its occurrence and prevalence in this State. Will you be kind enough to furnish me with a history of the disease as it occurred in your locality? In order to secure a uniformity of reports and detailed information, will you please use this blank, returning the same to me in the enclosed addressed envelope, not later then December 1, 1885?

C. N. METCALF, M. D.,
Secretary and Executive Officer.

Question 1. How many cases of the disease occurred in your county?......

Question 2. How many deaths?......

Question 3. How did the disease originate?......

Question 4. How was it spread?......

Question 5. Were there any evidences of its contagiousness?......

Question 6. How many cases in each family?......

Question 7. Was isolation and disinfection resorted to?......

Question 8. Can you give any cause for the outbreak and spread of the disease?......

Question 9. Were the funerals of persons dead from diphtheria public?...... Were the coffins opened after the bodies had been placed in them?......

Question 10. Give any other information you may deem pertinent?......

REPORT ON DIPHTHERIA.

BY H. V. SWERINGEN, M. D., FT. WAYNE, IND.

1. Twenty-seven reported.

2. Twenty.

3. This question, as are all similar ones, is a puzzler. If the questioner will tell me what diphtheria *is*, its etiology, etc., I will tell him how the disease originated in any given case.

4. I am obliged to answer in the deepest humility, I don't know. Grant it that the disease *is* a zymitic one, and preventable, which it no doubt is, and largely due to unhygienic influences, the fact yet remains that we must become better acquainted with its etiology, its true character, its essence, its more or less tangible cause, before we can treat or prevent it *intelligently*.

5. None other than the fact that several cases occurred in the same family. Several cases are on record where the attending physician contracted the disease and died from it.

6. In one family three died without the attendance of *any* physician.

7. In some cases they were, and with the happy result of preventing its spread. I believe this was the fact in all cases so treated. Isolation and disinfection were *not* resorted to in the above mentioned instance, to my certain knowledge. Whether they were observed in *all* other cases I am unable to state.

8. I can not. I wish I could, for then, if correct, we might be able to better treat and prevent this terrible malady.

9. Not to my knowledge. In several instances it was difficult to get together a sufficient number of people to conduct the funerals. Not to my knowledge.

10. In several cases of naso-pharyngeal diphtheria the immediate cause of death was diphtheritic croup, the exudate finally appearing in and closing up the larynx, causing diphtheritic laryngitis and croup. Tracheotony was proposed in each case, but the proposition was rejected by the parents.

REPORT ON DIPHTHERIA.

BY E. WALKER, M. D., DELPHI, IND.

1. Forty-two.

2. Ten.

3. Spontaneously in all so far as reported.

4. By contact when in the same family, though in some, the most malignant, only one case has occurred in a family of seven, but there was only one other child.
5. Yes; but not in all cases.
6. Five in two, six in one, four in three, two in five, and one each in four.
7. So far as I know or could secure it, though have reason to believe in some both were imperfect.
8. None whatever.
9. None that I could prevent. No.
10. I have reason to believe many cases were reported that should not have been diagnosed as diphtheria.

REPORT ON DIPHTHERIA.

BY D. J. SWARTZ, M. D., DEKALB COUNTY, IND.

1. See reports for quarters. There have been in addition some mild unreported cases.
2. Thirteen.
3. Has occurred in several distinct localities, and its first outbreak can not be accounted for.
4. Usually by contact contagion.
5. Yes, by contact with, or close proximity to, the poison in a person sick with the disease; but none of mediate contagion.
6. From one to five.
7. Quite largely. Isolation, where the house was large enough to give a room to the sick, and disinfection generally.
8. None, except as stated. The spread has been checked in every instance immediately upon securing strict isolation of all suspected cases.
9. No.—I think not.
10. ———.

REPORT ON DIPHTHERIA.

BY A. D. BOOTH, M. D., NOBLESVILLE, IND.

1. Fifty-seven.
2. Ten.
3. The first cases seemed to be sporadic; after this by being exposed.
4. Appeared in different parts of the county at different times during the year. The first cases appeared to be sporadic. In a few cases other members of the afflicted families would take the disease.
5. Yes.
6. From one to three.
7. Yes, as much as the circumstances would admit of.
8. No.
9. No.—No.
10. ———.

REPORT ON DIPHTHERIA.

BY I. G. SIMS, M. D., PORTLAND, IND.

1. Twenty-one.
2. Seven.
3. Of sporadic origin.
4. By contact got in public school.
5. None manifested; great care by isolation.
6. Two in two families; three in three families.
7. Yes.
8. None known to me.
9. Yes.—In one case.
10. ———.

REPORT ON DIPHTHERIA

BY M. G. BLISS, M. D., CROWN POINT, IND.

1. Thirty-nine.
2. Nine.
3. In isolated families.
4. In no way that I am aware of.
5. Only as it occurred in families. I know of no case where the disease was carried from one house to another.
6. One, eight, two, one, one, one, one, one, one, two, two, three, one, one, one, one, six, two, three.
7. Disinfection in all cases. Isolation whenever practicable.
8. Can not, otherwise than it be endemic.
9. No.—No.
10. In my opinion, when our county becomes thoroughly drained diphtheria will be stamped out.

REPORT ON DIPHTHERIA.

BY E. L. ANNIS, M. D., LAPORTE, IND.

1. Ninety; from October 1, 1884, to October 1, 1885.
2. Fourteen.
8. Endemically, and by infection.
4. By contagion and infection.
5. Yes.
6. From one to five.
7. They were. I am informed by the local Boards of Health that a great many cases reported as diphtheria are simple pharyngitis or tonsillitis, and not true diphtheria.
8. In some cases a local cause was clearly found in the close proximity of foul cesspools and privy vaults, while in others no cause could be ascertained.
9. No.—No.
10. ———.

REPORT ON DIPHTHERIA.

BY GEORGE B. WALKER, M. D., EVANSVILLE, IND.

1. Two hundred and forty-four.
2. Ninety-three.
3. Generally from contagion; sometimes apparently spontaneously.
4. Sometimes by contagion.
5. Yes, by its being taken from afflicted families.
6. One to seven.
7. As far as practicable.
8. Supposed to be from foul air in some cases.
9. Not often.—Not often.
10. I suppose that this report is measurably correct both as to the number of cases and deaths.

REPORT ON DIPHTHERIA.

BY .I E. LAWRENCE, M. D., COLUMBIA CITY, IND.

1. ———.
2. Thirty-three.
3. In fifteen cases it was traced to direct contagion; in eight to persons visiting diphtheria sick, and carrying the poison in their clothes, or by infection.
4. By contagion and infection. Ten cases seemed to be sporadic, as no direct cause could be found.
5. Yes. In the fifteen cases, direct.
6. From one to four. When there was only the one serious, the others would not be reported.
7. Yes, in all cases when under the care of a physician, but often families afflicted would think it only a bad cold, and let the family as well as visitors, all together, in same room; thus the spread of disease.
8. I can not. It was raging in different parts of the county at the same time, and the cases occurring last, or since the disease is less violent, occur in districts that suffered complete immunity during the first of disease.
9. No; all buried from the house.—No; none but one, which was shipped here from a distance, and a misrepresentation was the reason.
10. Many families of six or eight had but one case in a family. By isolation and disinfection others would escape or have but slight trouble of throat. And all these milder cases were not reported at all. In the county, I believe there were, say, one hundred cases in the mild form not reported, and it was from some of these cases that severe cases were caused, by allowing them to play together, the first not looked upon by parents as of any consequence, no physician being in attendance.

DYSENTERY.

This disease caused 239 deaths within the year, 60.66 per cent. of which occurred during the months of August and September. The depressing influences of warm weather, the violation of hygienic laws, unsanitary surroundings, such as soil moisture and decomposing animal and vegetable matter, are the causes which lead to the development of the disease. The discharges from the bowels of a person sick with this disease should be disinfected immediately upon their passage from the body and treated precisely as the discharges from typhoid patients.

MALARIAL FEVER.

In this group we include bilious, catarrhal, congestive, intermittent, pernicious and remittant fevers. The total number of deaths from these fevers within the year was 296.

It will be seen by looking at the table presented above that this class of febrile disturbances is gradually disappearing from our State, which is undoubtedly due to the enormous amount of underground tile that has been laid within a few years, coupled with extensive drainage of swamps and marshes and the improved cultivation of our lands.

SCARLET FEVER.

The total number of cases reported for the year was 1,342, of which 195 were fatal, an increase in the mortality from this disease of 17 over last year. Within the year the prevalence of the disease has been general, but not of a malignant type, its presence being reported in sixty counties with an average of 3.2 deaths to a county. The slight increase in the mortality which is shown we believe is to be accounted for in the constantly increasing population of our State, and also from the fact that more complete reports of contagious and infectious diseases have been received than heretofore. Scarlet fever, scarlatina, scarlet rash and canker rash are several names for one and the same disease. The name scarlet fever is the one that should be in general use, as so many names confuse the minds of the people. It is gratifying to be able to say that health officers, physicians and parents generally have comprehended the contagious character of the disease, and also that the mildest case can communicate the disease in its severest form. In the several outbreaks that have occurred in the State preventive measures, such as isolation, disinfection, etc., have been promptly instituted to prevent the spread of the malady, and such precautions have been the means of saving the lives of many children. The following reports obtained from health officers in the localities where the disease prevailed will be found worthy of careful examination.

INDIANA STATE BOARD OF HEALTH.

Secretary's Office, 20 *and* 21 *Masonic Temple.*

REPORT ON SCARLATINA.

By..................................M. D.

....Ind.

Dear Doctor:

The........................ County Board of Health reports ......deaths from Scarlatina in your county from September 30, 1884, to September 30, 1885. Recognizing, as we all do, that this disease belongs to the Zymotic or Preventable class, in order to protect the citizens of the State against its ravages in the future as fully as possible, I desire to secure as full a history as practicable of every case that has occurred in the State since September 30, 1884, to 1885. For that purpose I send you this blank, with return envelope. Will you please fill it as completely as you can, and return it to me between now and December 1, 1885.

C. N. Metcalf, M. D.,
Secretary and Executive Officer.

Question 1. How many cases of Scarlatina have occurred in your county since September 30, 1884? ....

Question 2. How many deaths from Scarlatina have occurred in your county since September 30, 1884? ....

Question 3. How did the attacks originate? ....

Question 4. How was the disease spread? ....

Question 5. How many cases occurred in each family? ......

Question 6. Were there any evidences of its infectious nature by being carried by *persons* or *things* from a case to unaffected parties? ....

Question 7. Was isolation and disinfection resorted to? ......

Question 8. Were the members of infected families prevented from associating with the public, attending school, church, etc.? ....

Question 9. Any other observations interesting, please add: ....

REPORT ON SCARLATINA.

BY A. B. BRADBURY, M. D., MUNCIE, IND.

1. Forty eight reported.

2. Three.

3. Unknown in most instances.

4. By contagion. In one instance the first case was very mild and was not recognized, and continued in attendance at school. Fourteen cases resulted.

5. From one to six.

6. There was. In some instances, however, cases occurred in which it was not possible to ascertain the source of the contagion.

7. Yes.

8. Yes. The cases have generally been very mild and some were without the characteristic eruption. Many cases have doubtless occurred, and were not recognized.

9. ——.

REPORT ON SCARLATINA.

BY A. D. BOOTH, M. D., NOBLESVILLE, IND.

1. Thirty-nine.

2. Seven.

3. Appeared in different parts of the county at different times during the year. The first cases appeared to be sporadic, generally appearing in the western part of the county first.

4. In four cases it was carried by the patients during early convalescence from a very mild attack, which, in two cases, did not cause the patients to take the bed, while from this the most malignant form was produced.

5. From one to five.

6. Yes; in four cases it could be traced directly to the patients carrying it themselves.

7. In a majority of cases it was.

8. Yes, as much as was possible. In one instance where a child was permitted to attend school with a mild rash, in just twelve days from that date fourteen of the children attending school on that day were taken with the disease.

9. ——.

REPORT ON SCARLATINA.

BY CHARLES A. WHITE, M. D., DANVILLE, IND.

1. Sixty-six cases reported, fifty really.

2. Seven reported.

3. The origin was generally unknown, except in a few instances where it was know to have been contracted by children visiting out of county by contagion.

4. There has been no general spread of the disease, although appearing in different and remote parts of the county at about the same time in a family of two or three.

5. See question 9.

6. None proven. Two children went from a house where a child was suffering from the fever to school one and a half days without infecting any one. In another instance this occurred also.

7. It was always ordered, and in most severe cases was partially carried out.

8. Generally. The people here are beginning to look well to this important point, demanding the execution of the rules fully, and thus informing the Health Officer when his services are needed.

9. Seventeen families had one case each, the membership of these families ranging from three to eight, or more. Note this point: Eight families had two cases each; one family had three cases; the County Poor House had five cases; the Reform School, numbering at that time from 435 to 460 inmates, had only five cases, making a total of just fifty cases. As shown above, the record shows sixty-six cases, but many cases are reported twice. For instance, a physician is called to a family to-day and finds one case and reports it at once. To-morrow he calls and finds a second case. He then reports two sick. The Health Officer thus has two returns, one showing one case, and the other two, making three, when in reality there are only two. This fact, it seems to me, is worth mention for the following reason: I anticipate that most reports are made to you from the record and not from the original returns, as I have here done. If made from the record, the per cent. of deaths from the disease would be too small, and would lead to erroneous conclusion as to the fatality of the disease.

REPORT ON SCARLATINA.

BY MORRIS DRAKE, M. D., SHELBYVILLE, IND.

1. Twenty-three reported.

2. Four.

3. When only one case in a neighborhood, I do not know the causes, though in some by contagion.

4. In some cases by contact, others by friends visiting at the homes of those affected. Such was the case in Jackson and Washington townships.

5. Five in one, three in one, two in each of four families, and the rest one each.

6. Yes. That was the cause in three instances, so it was claimed.

7. In most cases, but in some isolation could not be practiced, on account of their houses.

8. Not with the public in general, though they were from school, etc. In the country the former is hard to enforce.

9. There were cases only in two families in this city (one east and the other west side of city), sporadic, I think. Most of those in the country were in Washington and Johnson townships, and in the very best families and healthy surroundings.

REPORT ON SCARLATINA.

BY I. E. LAWRENCE, M. D., COLUMBIA CITY, IND.

1. Thirty-five.

2. Seven.

3. In three out of the seven from contagion; the others were sporadic, as far as could be learned. The outset of disease was by convulsions in three cases; the others by high fever and intolerable aching, as usual.

4. By contagion in three cases; the others were isolated cases.

5. In the three formerly mentioned there were three in a family, the others only two, some of the family escaping.

6. In three cases it followed the visiting by parties who had been in rooms with scarlatina patients. In the same cases the children all visited families where the disease was, and did not know of the sickness until in the house.

7. Yes, as soon as a physician was called.

8. Yes, as soon as medical aid was called, and in nearly all cases that was not until the patient was broken out with the rash. In those that had convulsions, the rash never came out good before the death of patient.

9. In some of the cases that died the rash was of the purpuric character, coming out scarlet, and in an hour or two changes to purple. All cases so changing died.

10. ——.

TYPHOID FEVER

Is a specific zymotic disease, not limited or restricted geographically, and prevails in all sections of our country. Our reports show that more deaths result from this fever between the ages of twenty and thirty than during any other period of life. It affords the sanitarian an extensive field for investigation and study, as each outbreak and each individual case is a problem in itself that should be solved and the cause of its presence determined by a careful examination of everything connected with the hygienic surroundings of each household where the disease exists. It is infectious and insidious in its nature, with a specific poison contained in the intestinal discharge of those affected, and by air or water may be introduced into the system of a susceptible healthy individual where it will reproduce the same disease. The fever is disseminated by its specific virus in the emanations from sewers, drains, cess-pools, water closets and privies or water which has been contaminated. Each case is a central point from which the infection may spread, as the excremental discharges contain the special poison of the fever. Therefore, they should be thoroughly disinfected as soon as they pass from the body. Water being the medium by which the germs of the disease are most frequently conveyed into the system, its supply should be critically examined, and, if found polluted, be immediately abandoned. The trapping of house drains, sinks and water closets should be efficient and complete. If there is any contamination of the surrounding soil by leakage from sewers, cess-pools or privies connected with the premises, it should be corrected at once.

INDIANA STATE BOARD OF HEALTH.

Secretary's Office, 20 and 21 Masonic Temple, Indianapolis.

REPORT ON TYPHOID FEVER.

By..M. D.,

..................................Ind.

Dear Doctor:

The..........County Board of Health reports.......deaths from typhoid fever in your county from September 30, 1884, to September 30, 1885. Recognizing, as we all do, that typhoid fever belongs to the zymotic or preventable class of diseases, I am anxious to secure as much information regarding the cases reported as possible, in order to be prepared to protect the citizens of the State against the malady hereafter; to that end I hope that you will be kind enough to fill up the enclosed blank and send me between now and December 1, 1885. I send addressed envelope.

C. N. Metcalf, M. D.,
Secretary and Executive Officer.

Question 1. How many cases of typhoid fever have occurred in your county from September 30, 1884, to September 30, 1885?......

Question 2. How many deaths from it?......

Question 3. Were there any families in which several cases occurred?......

Question 4. Were there any families in which more than one death occurred?......

Question 5. If so, how did the outbreak of the disease occur?......

Question 6. Can you assign any cause for its presence?......

Question 7. Was the condition of the premises good?......

Question 8. Was the water supply pure, and safe from pollution?......

Question 9. Were there any evidences of the contagiousness or infectiousness of the disease?......

Question 10. Were precautions used in disinfecting and destroying the discharges from the patients?......

Question 11. Any additional information or observations please insert here:......

REPORT ON TYPHOID FEVER.

H. V. SWERINGEN, M. D., ALLEN COUNTY.

1. There were but forty-six reported, not counting the typho-malarial cases; but that number is certainly incomplete. There were undoubtedly many cases not reported.
2. Thirty-five reported.
3. Yes.
4. Yes.
5. I can not answer this question so as to give you any good idea upon which to base a cause for it. Several years ago, in this county, before the establishment of the State Board of Health there were five deaths in one family, and yet no *satisfactory* cause could be assigned for them.
6. Nothing positive.. The opinion is gaining ground among our physicians that the germs or bacteria of the disease find entrance into the system by the medium of drinking water, and that the water becomes contaminated by the too close approximation of privy vaults to the wells. This hypothesis has never been, to my knowledge, demonstrated, and never will be until the chemist and microscopist, paid by the State, *studies* for a year or more the etiology of the disease, traveling from house to house, farm to farm, premises to premises, making the *practical* investigation of the subject his special study, for which he should be amply compensated.
7. In not a few cases it was apparently good.
8. This question can be answered by no man or body of men without having made a careful, scientific, chemical and microscopical examination thereof. The water may appear pure and taste pure, and yet be most foul and polluted. As to the second part of the question, I think there are very few wells in the country entirely safe from pollution.

9. In one case, nursed by the mother, as soon as the child—a boy eighteen years old—commenced to convalesce, the mother took the disease and died of it.

10. Not in the above case, and by no means in all cases.

11. Typhoid fever has been, I may say truly, unusually fatal this year. Several of my own cases, and quite a number seen in consultation, died when apparently they were approaching convalescence. On the 16th day of November occurred the death of the only *typical* case of "relapsing fever," I think, I have ever seen. The case lingered nearly six weeks, and only a few days before death the patient—a lady thirty-five or forty years of age—sat up and read the newspapers, so distinct were the remissions—probably twelve in number.

REPORT ON TYPHOID FEVER.

BY J. S. ARWINE, M. D., BARTHOLOMEW COUNTY.

1. Twenty-five reported.
2. Seventeen.
3. Two—where two cases occurred.
4. No.
5. No cause for outbreak discovered.
6. No.
7. As good as generally found in the country.
8. No. All the water used throughout this county is first waters, and consequently surface water.
9. No.
10. Yes, in some places. Not generally.
11. ———.

REPORT ON TYPHOID FEVER.

BY H. H. SETSER, M. D., CRAWFORD COUNTY.

1. Twenty-five.
2. Nine.
3. Yes.
4. None reported.
5. There are no reasons assigned. In one family which I treated there were four cases following a death from it during the summer. The first case was brought home, a distance of eight miles, and in a few weeks the outbreak occured.
6. In my cases, probably from want of proper disinfecting as directed. In other cases not reported.
7. In my cases premises were high and well drained. Well water was used by family. House on an elevated knoll of ground and isolated, being a farm house.
8. Not reported in all cases.
9. None reported.
10. In my cases it was ordered done, but I think was neglected at times.
11. ———.

N. B. I say in the above—my cases—for the reason I have no full account of the others. They are very imperfect.

REPORT ON TYPHOID FEVER.

BY W. H. WELLS, M. D., DUBOIS COUNTY.

1. About ninety cases; cases that recovered were not reported.
2. Fifteen.
3. From two to five cases in a family.
4. In four families two, one family three, one family four.
5. Can not be explained, except as below.* One family was attacked here, another there, and the neighboring families often escaped.
6. No.
7. In those families that had deaths the condition of the premises were very bad.
8. No.
9. Several instances where the disease was supposed to have occurred from infection.
10. Yes, but very poorly carried out.
11. *The year before there was one case in the township—a servant girl—who got the disease at Evansville, and was brought home sick. The fever started in this family (a saloon keeper) the next year, and there were five cases in the family.

REPORT ON TYPHOID FEVER.

BY J. W. MOCK, M. D., FOUNTAIN COUNTY.

1. Twenty-eight.
2. Four.
3. In one family there were three cases; in three families, two each.
4. No.
5. ———.
6. Not with any certainty.
7. Concerning the majority of the cases I have no information on this point. In the few cases in which I have any knowledge there was reason to infer that either impure water or contaminated air might have produced the disease.
8. Reports do not state. In one instance, where two cases occurred in one family, the water supply was from a surface well in which there was abundant opportunities for contamination.
9. No.
10. In some instances there were. Unable to answer as to the majority of cases.
11. Seventeen of the twenty-eight cases occurred in the practice of one physician in the eastern portion of the county, but I do not know that he has arrived at any satisfactory solution of the question as to the etiology of typhoid fever.

REPORT ON TYPHOID FEVER.

BY A. D. BOOTH, M. D., HAMILTON COUNTY.

1. Ten.
2. Eight.
3. Yes.
4. Two families.
5. It was about three weeks after the death of the first case that the other members of the family were taken.
6. No.
7. Reasonably so in a majority of cases; in a few cases they were bad.
8. So far as could be ascertained in a majority of cases it was fair. In a few cases it could be traced to bad water.
9. Yes, in a few cases.
10. Yes.
11. ———.

REPORT ON TYPHOID FEVER.

BY J. M'L. MOULDER, M. D., HOWARD COUNTY.

1. Seventy-two.
2. Seventeen
3. Three.
4. No.
5. In two instances no precautions were taken in destroying discharges nor disinfecting premises. In one family four cases occurred; in the other three. In another family two cases occurred where proper precautions were used.
6. Nervous prostration; residence near foul sewer and vaults, one; impure water supply, ten. No cause given in the other cases.
7. The condition of premises was bad in nine instances.
8. In ten cases, no.
9. In the three cases mentioned only.
10. No, in seventeen cases.
11. ———.

REPORT ON TYPHOID FEVER.

BY LAGRANGE SEVERANCE, M. D., HUNTINGTON COUNTY.

1. Only fatal cases have been reported.
2. Eighteen reported.
3. In four families, two cases each.
4. One.
5. In the one case from bad water and the unsanitary condition of the premises. In this family there were two deaths.
6. In one case the disease followed the nursing of a relative in Wabash County.
7. Yes, with the exception above.

8. Water supply was not examined chemically, but in three instances it was reported by the attending physician as bad.

9. The case referred to would seem to be so.

10. Yes, so far as I have been able to learn.

11. A critical examinatian of the above reported cases, by the aid of the attending physicians, leads me to believe that at least one-third should not be classed as typhoid fever. Three cases, occurring in old persons, were of malarial origin, no enteric symptoms appearing. Two were of typho-malarial nature; the one complicated with deep-seated abscess of the lungs, and the other with cerebral trouble. Another was a low form of fever following confinement. These cases have not been confined to any one section of the county, but have occurred in townships widely separated.

REPORT ON TYPHOID FEVER.

BY ROBT. M. WEIR, M. D., MONROE COUNTY.

1. Thirty.
2. Six.
3. Yes. Four.
4. No.
5. ——.
6. In one case there were four cases in one family due to drainage of kitchen slops into well; one with two cases water and bad drainage into cellar. In other cases no cause assigned.
7. Appeared good, or at least so reported.
8. Do not know. In all cases where I examined the places personally, reasonably safe.
9. None, except where more than one in a family was attacked. Was not transmitted to any nurse or neighbor.
10. Yes.
11. This report should be regarded as imperfect, as only malignant cases were reported.

REPORT ON TYPHOID FEVER.

BY S. H. PEARSE, M. D., POSEY COUNTY.

1. Forty-nine.
2. Twelve.
3. Yes.
4. One family.
5. There were three cases in the family where two deaths occurred, and the hygienic surroundings seemed good.
6. I can not.
7. In one family where there existed two cases the ceilings were low and house damp, with poor ventilation.

8. In one family where two cases occurred they used well water, which was probably impure.
9. No.
10. Disinfection was used in some cases, others not.
11. A case treated by mysel fhad the best of hygienic surroundings. Another case I treated was evidently caused by the proximity of place of living to three ponds of stagnant water. I used strict disinfection, and removed the case to a place with good hygienic surroundings, and there was a good recovery.

REPORT ON TYPHOID FEVER.

BY J. E. MARKLE, M. D., RANDOLPH COUNTY.

1. Thirteen cases reported.
2. Eight. Also five deaths from typho-malarial fever.
3. Yes.
4. No.
5. ———.
6. Not positively. We have in this county the most when the wells of drinking water are low. Next in a very wet time when the wells are filled with surface water. This has been my observation for the last twenty-five years.
7. ———.
8. Have no means of knowing.
9. Yes.
10. Yes, but to what extent I can not say.
11. ———.

REPORT ON TYPHOID FEVER.

BY GEORGE B. WALKER, M. D., VANDERBURGH COUNTY.

1. Six.
2. Thirty-five.
3. One; two in some cases.
4. Yes.
5. Generally from impure air; occasionally from exposure to the sick.
6. Only as stated above.
7. Not always.
8. Supposed not to be in some instances.
9. Some.
10. I suppose this was done in some cases.
11. You will perceive from above statement that cases of typhoid fever were not generally reported, while the deaths were fully reported.

REPORT ON TYPHOID FEVER.

BY J. R. CRAPO, M. D., VIGO COUNTY.

1. Do not know, many were not reported.
2. Forty-two.
3. Yes.
4. Yes.
5. Do not know.
6. Can not unless water was or is polluted from cemetery.
7. Yes.
8. There was no examination. About seventy cases occurred in the Fourth Ward, which is immediately south of and adjoining Woodlawn Cemetery, the Wabash River on the west.
9. None that I observed.
10. They were.
11. My opinion is that Woodlawn Cemetery had something to do in producing the disease in the Fourth Ward, as in all of the other wards of the city there were not more than twenty cases.

REPORT ON TYPHOID FEVER.

BY I. E. LAWRENCE, M. D., WHITLEY COUNTY.

1. Twenty-one, as near as I can find out. Many not reported as they were mild.
2. Ten.
3. Three.
4. One.
5. In the Bennett family it was traceable to the water. Son and mother took sick four days apart and died four days apart. Another son and daughter were indisposed for some two weeks, but had no serious trouble. The water showed animal matter at all times and excessively.
6. Only in this one family, certain. In another family the lady of the house took care of a sister in next county; after returning home had miscarriage and typhoid fever followed. I could not ascertain if it was from patient in next county or from exposure and fatigue and thus brought on, but the son of the lady took the fever from her. He was four years old.
7. In all but the Bennett family, that I could find out.
8. It was only analyzed in four cases. In one of these it was impure; the others as good as most water, yet in none free from animal poisons as shown by the microscope.
9. In but the one case—of contagion—unless the mother contracted disease away from home.
10. Yes. In no cases were they carried through the house but put out a window or door from patient's room and mostly buried.
11. There is nothing of importance in any of the cases.

TYPHO-MALARIAL FEVER.

Typho-malarial fever caused 176 deaths within the year, 1.05 per cent. of the total mortality. It will be observed by examining the figures in the comparative table that typhoid fever and typho-malarial fever maintain a relative ratio in the increased and decreased mortality of each, showing that when typhoid and malarial poisons are associated that the typhoid predominates.

SMALL-POX.

Within the year there were forty-four cases of small-pox in the State, of which twelve were fatal. They were confined to five counties. The health officers of these counties deserve favorable mention for the faithful performance of duty. By strict attention to duty and the utmost vigilance, they succeeded in preventing a spread of the disease and ultimately stamped it out. The orders of the Board regarding vaccination, isolation and disinfection were promptly executed.

The success attending the strict enforcement of these measures is attested by the fact that at the present time there is not a case of this loathsome disease in the State. It is a well-established fact that it can be prevented or materially modified by vaccination. In this progressive age, with all its advanced ideas and enlightenment, a wide-spread epidemic of small-pox in a community can be attributed to nothing else than the grossest negligence or ignorance on the part of the people.

Every intelligent person knows that by vaccination they can be rendered incapable of taking the disease. The pain attendind the operation is of no consequence, and the danger from it is scarcely worthy of notice. The effects are not serious—a sore arm and slight indisposition for a few days is cheaply purchasing immunity from this fearful malady. Under danger of exposure and upon the appearance or threatened invasion of the disease, the operation should be repeated, regardless of previous vaccinations, provided that the person is not physically incapacitated by sickness. It is the surest test of the insusceptibility of the individual to the disease, and because it is not known how long the protective influence of a single operation will last. It is true that occasionally persons who have been properly vaccinated have small-pox in a mild form, and they are much less disfigured than those who have not been protected. (The liability to the disease is no greater than if the subject once had it.)

Prof. Austin Flint, Sr., of New York, a well-known American authority, says: "Certain it is were all the requisites for the most perfect vaccination to be invariably observed, and if all persons living were vaccinated and re-vaccinated, small-pox, if not exterminated, would be insignificant as regards its prevalence and severity. The difficulty of securing to all mankind a protection against the disease, almost, if not altogether, complete, is not in the insufficiency of the means, but in enforcing their adoption to the fullest possible extent. Vaccination and re-vaccination, in order to be universal, must be compulsory, and authoritative measures to secure the proper and successful performance of the operation are essential." In regard to the kind of virus that should be used in making vaccinations, we refer to the following rule adopted by this Board:

"All vaccinations must be with *non-humanized virus.* But no such virus shall be bought or sold to be used by physicians in vaccinating except such virus has been taken from the original package as obtained from the producer of said virus, and such original package of one point or more, or one scab or more, shall be bought and sold in sealed envelopes, having upon such envelopes the name of the proprietor of the farm where the virus is produced, and also the date when such virus was taken from the cow." The only exception to this rule that would be recognized by this Board would be in the event that small-pox was prevalent in epidemic form, and the health officer should certify as to the impossibility of obtaining such virus in sufficient quantity, and also as to the purity of the humanized virus to be used in lieu of the bovine virus.

We recommend that the Legislature make provisions for an epidemic fund, which shall be under the control of the Governor, to be used whenever, in his judgment, our State is threatened with an invasion of this, or any other, pestilential disease.

INDIANA STATE BOARD OF HEALTH.

Secretary's Office, 20 and 21 Masonic Temple, Indianapolis.

REPORT ON SMALL-POX.

By.................................M. D.,

....Ind.

Dear Doctor:

The...................County Board of Health reports........... deaths from small-pox in your county since September 30, 1884. Recognizing this disease as a zymotic one, belonging to the preventable class, in order to protect the citizens of the State against future outbreaks of the malady, I am anxious to secure a history of all the cases occurring in Indiana for the past year. To that end, will you kindly furnish me with the answers to the following questions upon this sheet, and return the same to me between now and October 1, 1885.

C. N. Metcalf, M. D.,
Secretary and Executive Officer.

Question 1. How many cases have occurred in your county since September 30, 1884? ....

Question 2. How many deaths have occurred in your county since September 30, 1884? ....

Question 3. How was the disease introduced? ....

Question 4. How was it spread? ....

Question 5. Was vaccination and re-vaccination promptly resorted to? ....

Question 6. Was complete isolation and quarantine practiced? ....

Question 7. Were the funerals strictly private?......... Were they within twelve hours of death? ....

Question 8. Were there any deaths of persons who had been successfully vaccinated? .... If so, how soon after vaccination? ....

Question 9. Did you observe any difference in the protective value of bovine and human virus? If so, in favor of which? ....

Question 10. What unpleasant effects of vaccination did you observe, if any? ....

Question 11. Did those unpleasant effects follow the use of bovine or human virus? ....

Question 12. Did any school children die with the disease? ....

Question 13. Any other observations please give here.........

REPORT ON SMALL-POX.

BY I. G. SIMS, M. D., PORTLAND, IND.

1. ———.
2. ———.
3. By visitor from Minnesota; came to relatives at Red Key. Was a case of modified small-pox, he having been successfully vaccinated.
4. Was not spread.
5. Yes.
6. Yes.
7. ———.
8. ———.
9. ———.
10. ———.
11. ———.
12. No.
13. ———.

REPORT ON SMALL-POX.

BY E. L. ANNIS, M. D., LAPORTE, IND.

1. One.
2. None.
3. By passenger on C. & G. T. R. R. en route to Chicago.
4. It did not spread, as the case was isolated and thorough disinfection resorted to.
5. Yes.
6. Yes.
7. ———.
8. No.
9. Bovine virus was used.
10. Nothing unusual.
11. ———.
12. No.
13. ———.

REPORT ON SMALL-POX.

BY J. B. CRAPO, M. D., TERRE HAUTE, IND.

1. Forty.
2. Eleven.
3. We do not know. Supposed to have been introduced by a tramp.
4. By the ignorance of a physician. Did not recognize what the disease was until many were exposed.
5. Yes.
6. Yes.
7. They were. Yes.
8. No.
9. There was nothing but bovine used.
10. There was none.
11. ———.
12. No.
13. All persons that were not vaccinated died but two or three. Those that were vaccinated, even after exposure, recovered to a person.

PHTHISIS PULMONALIS.

Phthisis pulmonalis leads all other diseases in its destruction of human life. The mortality from this disease compared with that from all causes was 12.8 per cent., a slight reduction over last year. This disease, which is such a terror to the human race, is considered by many sanitarians a preventable one. Statistics show that one-eighth of the people who die in this country die from consumption. It has been demonstrated by experiments that tubercles are produced by want of light and pure air. Impure and unhealthy occupations are predisposing causes of the disease. Salesmen in stores are particularly liable thereto, because of their employment in rooms where the air is superheated and the ventilation is bad. Phthisis is common among operatives in factories, rolling mills, machine shops, coal mines, etc., their occupations surrounding them with dust-laden and vitiated air. Soil, moisture and crowd-poison, as it exists in the tenement houses of our large cities, intemperance, over exertion, and in fact anything which tends to lower the vital forces predisposes to develop tubercular disease of the lungs, and especially so if there be any hereditary tendency. For many years it has been suspected, and is now believed by many, that consumption of the lungs is a true infectious disease, and that it is due to a special cause, which when implanted in the system is capable of growth and multiplication; that the harmful agent is a minute vegetable organism that can be cultivated outside of the body for an indefinite time, and that when inoculated into healthy animals will always produce the same results—tuberculosis. It is claimed by the believers in the germ theory of consumption that Dr. Robert Koch, of Berlin, has proved that the bacillus tuberculosis was invariably present in the lungs of those dying from consumption, and that the matter expectorated by a consumptive patient swarms with these parasites. It is said that they are not injured by drying. They become mixed with the soil, are ground to dust and blown about with every breeze. They are inhaled with the air we breathe. Hence it is fortunate that they must remain at rest ten days in the most suitable location before they can commence the process of reproduction. However, long before this time can elapse they are expelled by the healthy lungs. If the smaller bronchial tubes and air cells are lined with a thick, gluey material, so that these vegetable organisms can attach themselves the length of time required for germination, or if the vital forces become lowered by serious illness, so that sufficient strength is wanting to throw them off, they begin to grow and multiply without limit. This is, briefly, the germ theory of consumption, which, if sustained by future demonstrations and experiments, and is accepted by the profession, it will place the disease in the zymotic class, and will be dealt with as such by sanitarians.

TABLE No. II.

CLASS ONE—ZYMOTIC DISEASES.

Causes of Death, Number of Males and Females, Nationality and Social Relations for the Year Ending September 30, 1885.

CLASS ONE—ZYMOTIC.	TOTAL.		NATIONALITY.						SOCIAL RELATIONS.								
	Males.	Females.	American.		Foreign.		Not Reported.		Single.		Married.		Widowers.	Widows.	Not Reported.		Total.
			M.	F.	M.	F.	M.	F.	M.	F.	M.	F.			M.	F.	
ORDER ONE—MIASMATIC.																	
Anthrax	6	...	6	...	...	...	...	...	1	...	5	...	...	...	...	...	6
Cholera infantum	312	315	311	315	1	...	...	...	312	315	...	...	...	...	...	...	627
Cholera morbus	13	21	10	16	2	5	1	...	3	7	8	6	1	8	1	...	34
Congestive chill	16	23	14	22	1	1	1	...	9	11	7	9	...	3	...	...	39
Croup	148	123	141	121	5	...	2	2	148	123	...	...	...	...	...	...	271
Diarrhœa	97	66	87	62	10	4	...	...	69	47	24	10	3	9	1	...	163
Diphtheria	219	192	215	184	4	5	...	3	216	184	2	6	1	...	...	2	411
Dysentery	131	108	119	97	11	10	1	1	99	59	22	26	9	20	1	3	239
Entero-colitis	37	31	36	30	1	...	...	1	36	27	...	3	1	1	...	...	68
Erysipelas	30	22	26	22	4	...	...	...	17	11	9	4	4	6	...	1	52
Fever, bilious	5	6	5	6	...	...	...	...	3	2	2	4	...	...	...	...	11
Fever, catarrhal	27	11	26	11	...	...	1	...	23	7	3	4	...	...	1	...	38
Fever, cerebro-spinal	76	84	74	79	2	4	...	1	67	61	9	19	...	2	...	2	160
Fever, congestive	14	6	13	6	1	...	...	...	9	4	1	2	3	...	1	...	20
Fever, continued	2	...	2	...	...	...	...	...	1	...	1	...	...	...	...	...	2
Fever, intermittent	8	5	6	5	2	...	...	...	6	1	2	4	...	...	...	...	13
Fever, malarial	66	66	59	61	7	2	...	3	34	40	28	20	4	5	...	1	132
Fever, pernicious	13	9	13	9	...	...	...	...	6	4	7	5	...	...	...	...	22
Fever, puerperal	...	88	...	79	...	7	...	2	...	2	...	86	...	...	...	...	88
Fever, relapsing	1	...	1	...	...	...	...	...	1	...	...	...	...	...	...	...	1
Fever, remittent	24	26	23	23	1	3	...	...	19	14	5	8	...	2	...	2	50

Fever, scarlet	97	98	96	94	1	1	...	3	94	95	1	2	1	1	1	...	195
Fever, traumatic	...	1	...	1	...	...	...	...	...	...	...	...	...	1	...	...	1
Fever, typhoid	379	369	343	344	26	23	10	2	199	199	161	136	14	27	5	7	748
Fever, typho-malarial	96	80	90	71	4	7	2	2	59	46	33	26	3	7	1	1	176
Gangrene	24	9	22	7	1	1	1	1	7	1	14	3	3	5	...	...	33
Measles	60	81	58	80	2	1	...	...	52	67	7	12	...	1	1	1	141
Milk sickness	3	4	3	4	...	...	...	...	3	1	...	3	...	...	...	...	7
Mumps	1	...	1	...	...	...	...	...	1	...	...	...	...	...	...	...	1
Pertussis	33	43	33	43	...	...	...	...	33	43	...	...	...	...	...	...	76
Puerperal peritonitis	...	12	...	11	...	1	...	...	...	1	...	11	...	...	...	...	12
Puerperal septæmia	...	21	...	17	...	3	...	1	...	1	...	20	...	...	...	...	21
Pyæmia	18	19	15	16	3	3	...	...	7	7	11	9	...	2	...	1	37
Septæmia	21	50	20	45	1	5	...	...	6	11	12	38	3	1	...	...	71
Small-pox	6	6	6	6	...	...	...	...	4	4	2	2	...	...	...	...	12
Total	1983	1995	1874	1887	90	86	19	22	1544	1395	376	478	50	101	13	21	3978
ORDER TWO—ENTHETIC.																	
Glanders	1	...	1	...	...	...	...	...	1	...	...	...	...	...	...	...	1
Syphilis, acquired	11	16	9	14	...	2	2	...	4	11	4	3	3	2	...	...	27
Syphilis, constitutional	9	4	9	4	...	...	...	...	9	4	...		...	...	...	...	13
Total	21	20	19	18	...	2	2	...	14	15	4	3	3	2	...	...	41
ORDER THREE—DIETIC.																	
Delirium tremens	8	...	8	...	...	...	...	...	1	...	7	...	...	...	...	...	8
Eczema	3	1	3	1	...	...	...	...	2	1	1	...	...	...	...	...	4
Inanition	155	145	148	138	6	5	1	2	133	126	19	8	3	11	...	...	300
Intemperance	23	...	16	...	7	...	...	...	7	...	11	...	3	...	2	...	23
Purpura	6	4	6	4	...	...	...	...	5	4	...	...	1	...	...	...	10
Urticaria	1	...	1	...	...	...	...	...	1	...	...	...	...	...	...	...	1
Total	196	150	182	143	13	5	1	2	149	131	38	8	7	11	2	...	3 46
ORDER FOUR—PARASITIC.																	
Aptha	6	4	6	4	...	...	...	...	6	4	...	...	...	...	...	...	10
Total	6	4	6	4	...	...	...	...	6	4	...	...	...	...	...	...	10
Total Zymotic Diseases	2206	2169	2081	2052	103	93	22	24	1713	1545	418	489	60	114	15	21	4375

TABLE No. II—Continued.

CLASS TWO—CONSTITUTIONAL DISEASES.

Causes of Death, Number of Males and Females, Nationality and Social Relations, for the Year Ending September 30, 1885.

CLASS TWO—CONSTITUTIONAL DISEASES.	Total.		Nationality.						Social Relations.								
			American.		Foreign.		Not Reported.		Single.		Married.		Widowers.	Widows.	Not Reported.		Total.
	Males.	Females.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.			M.	F.	
Order One—Diathetic.																	
Anæmia	10	33	10	33	...	...	...	...	7	12	3	21	...	...	...	...	43
Anasarca	1	3	1	2	...	1	...	...	...	...	1	1	...	2	...	...	4
Ascites	5	3	4	3	1	...	...	...	1	...	4	2	...	...	...	1	8
Cancer	48	77	43	69	5	7	...	1	12	8	31	38	5	28	...	3	125
Cancer, breast	1	16	1	15	...	1	...	...	...	2	1	11	...	3	...	...	17
Cancer, face	5	2	5	2	...	...	...	...	1	...	3	1	1	1	...	...	7
Cancer, liver	17	12	13	11	2	1	2	...	2	2	14	8	1	2	...	...	29
Cancer, rectum	2	1	2	1	...	...	...	...	...	1	...	...	1	...	1	...	3
Cancer, stomach	30	29	25	23	5	6	...	...	5	1	23	18	2	10	...	...	59
Cancer, uterus	...	31	...	27	...	4	...	...	...	...	...	23	...	8	...	...	31
Cancer, vertebræ	1	...	1	...	...	...	...	...	...	...	1	...	...	...	...	...	1
Chlorosis	1	10	1	10	...	...	...	...	...	8	...	...	...	1	1	1	11
Dropsy	73	71	48	60	20	11	5	...	22	15	41	35	10	20	...	1	144
Goitre	...	2	...	2	...	...	...	...	...	...	...	1	...	1	...	...	2
Heart rheumatism	5	3	4	2	1	1	...	...	2	1	2	2	1	...	...	...	8
Leucocythæmia	6	10	6	10	...	...	...	...	3	2	3	8	...	...	...	...	16
Lymphadenoma	3	2	2	1	1	1	...	...	1	...	2	2	...	...	...	...	5
Rheumatism	30	28	27	23	3	5	...	...	14	13	12	12	4	3	...	...	58
Total	238	333	193	294	38	38	7	1	70	65	141	183	25	79	2	6	571

TWO—TUBERCULAR																	
Abscess, psoas	2	5	2	5	...	...	...	...	2	3	...	2	...	...	...	...	7
Hydrocephalus	26	21	26	20	...	1	...	...	26	19	...	2	...	...	...	...	47
Meningitis, tubercular	53	55	53	54	...	1	...	...	48	51	4	4	...	...	1	...	108
Morbus coxarius	1	1	1	1	...	...	...	...	1	...	...	...	...	...	...	...	2
Phthisis pulmonalis	942	1188	818	1095	94	57	30	36	361	394	471	626	60	137	50	31	2130
Pott's disease	1	...	1	...	...	...	...	...	1	...	...	...	...	...	...	...	1
Rachitis	...	2	...	2	...	...	...	...	...	2	...	...	...	...	...	...	2
Scrofula	28	42	28	41	...	1	...	...	25	34	3	8	...	...	...	...	70
Tabes mesenterica	19	16	19	16	...	...	...	...	11	8	7	3	1	5	...	...	35
Total	1072	1330	918	1234	94	60	30	36	475	511	485	646	61	142	51	31	2402
Total Constitutional Diseases	1310	1663	1141	1528	132	98	37	37	545	576	626	829	86	221	53	37	2973

TABLE No. II—Continued.

CLASS THREE—LOCAL DISEASES.

Causes of Death, Number of Males and Females, Nationality and Social Relations, for the Year Ending September 30, 1885.

CLASS THREE—LOCAL DISEASES.	TOTAL.		NATIONALITY.						SOCIAL RELATIONS.								
			American.		Foreign.		Not Reported.		Single.		Married.				Not Reported.		
	Males.	Females.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Widowers.	Widows.	M.	F.	Total.
ORDER ONE—NERVOUS.																	
Apoplexy	130	79	102	68	20	7	8	4	33	10	72	41	19	26	6	2	209
Arachnitis	1	...	1	...	...	...	...	...	1	...	...	...	...	...	...	...	1
Brain, abscess	5	6	5	6	...	...	...	...	3	3	1	3	...	...	1	...	11
Brain, anæmia	1	1	1	1	...	...	...	...	...	...	1	1	...	...	...	...	2
Brain, congestion	116	93	110	90	6	2	...	1	93	70	19	12	4	11	...	...	209
Brain, disease	41	22	39	20	2	2	...	...	28	12	11	7	1	3	1	...	63
Brain, effusion	1	...	1	...	...	...	...	...	...	...	1	...	...	...	...	...	1
Brain, fever	16	19	16	17	...	...	...	2	14	18	2	1	...	...	...	...	35
Brain, hyperæmia	...	3	...	3	...	...	...	...	...	3	...	...	...	...	...	...	3
Brain, softening	38	16	32	13	6	2	...	1	2	6	26	5	9	4	1	1	54
Brain, tumor	2	1	2	...	...	1	...	...	1	1	1	...	...	...	...	...	3
Caries of spine	3	1	3	1	...	...	...	...	3	...	...	...	...	1	...	...	4
Cerebritis	70	74	69	74	1	...	...	...	61	62	8	8	1	3	...	1	144
Chorea	1	5	1	5	...	...	...	...	1	5	...	...	...	...	...	...	6
Convulsions	...	1	...	1	...	...	...	...	...	...	...	...	...	1	...	...	1
Convulsions, infantile	147	136	144	130	2	6	1	...	147	136	...	...	...	...	...	...	283
Epilepsy	16	11	15	11	...	...	1	...	11	8	5	3	...	...	...	...	27
Insanity	20	15	12	13	7	1	1	1	7	4	10	9	3	2	...	...	35
Locomotor ataxia	6	...	5	...	1	...	...	...	1	...	4	...	...	...	1	...	6

Meningitis	120	121	114	114	4	4	2	3	107	112	11	9	2	...	...	...	241
Meningitis, cerebral	57	54	55	51	2	3	...	...	54	49	2	2	1	3	...	...	111
Meningitis, spinal	13	12	11	11	1	1	1	...	11	10	2	2	...	...	...	...	25
Muscular atrophy	...	2	...	2	...	...	...	...	...	1	...	1	...	...	...	...	2
Myelitis	4	2	4	2	...	...	...	...	2	...	2	...	...	2	...	...	6
Neuralgia	1	5	1	5	...	...	...	...	...	...	1	2	...	3	...	...	6
Paralysis	154	162	136	140	13	18	5	4	34	33	91	67	25	58	4	4	316
Spina bifida	12	13	12	13	...	...	...	...	12	13	...	...	...	...	...	...	25
Spinal, sclerosis	4	3	4	3	...	...	...	...	1	3	2	...	1	...	...	...	7
Spine, disease of	2	1	2	1	...	...	...	...	1	1	1	...	...	...	...	...	3
Tetanus	16	2	14	2	...	...	2	...	14	2	2	...	...	...	...	...	18
Trismus nascentium	12	6	11	5	...	...	1	1	10	5	1	...	...	...	1	1	18
Total	1009	866	922	802	65	47	22	17	652	567	276	173	66	117	15	9	1875
ORDER TWO—CIRCULATORY.																	
Aneurism	4	1	4	...	...	1	...	...	1	...	3	...	...	1	...	...	5
Angina pectoris	19	17	18	13	1	3	...	1	2	4	13	9	3	3	1	1	36
Arteritis	1	1	...	1	1	...	...	...	...	1	1	...	...	...	...	...	2
Congestion	14	10	12	9	2	1	...	...	10	6	3	2	1	2	...	...	24
Embolism	3	5	2	4	1	...	...	1	...	1	3	2	...	2	...	...	8
Endocarditis	8	10	8	10	...	...	...	...	2	2	5	3	1	5	...	...	18
Epistaxis	3	1	3	1	...	...	...	...	2	1	1	...	...	...	...	...	4
Heart, clot	1	3	1	3	...	...	...	...	...	...	1	3	...	...	...	...	4
Heart, dilitation	1	4	1	4	...	...	...	...	1	...	...	2	...	1	...	1	5
Heart, disease	182	142	156	122	22	16	4	4	43	29	99	65	26	47	14	1	324
Heart, fatty	12	6	8	6	3	...	1	...	1	1	9	4	2	1	...	...	18
Heart, hypertrophy	11	4	11	3	...	1	...	...	1	...	8	1	2	2	...	1	15
Heart, paralysis	20	18	18	17	1	...	1	1	7	1	9	15	4	2	...	...	38
Heart, valvular disease of	38	39	29	32	9	7	...	...	9	8	27	20	2	10	...	1	77
Hemorrhage	8	10	8	9	...	1	...	...	5	2	3	6	...	2	...	...	18
Hydropericardium	11	17	9	16	2	1	...	...	1	4	5	9	4	4	1	...	28
Pericarditis	11	9	10	9	1	...	...	...	3	3	8	4	...	2	...	...	20
Phlebitis	...	2	...	1	...	1	...	...	...	...	...	2	...	...	...	...	2
Total	347	299	298	260	43	32	6	7	88	63	198	147	45	84	16	5	646
ORDER THREE—RESPIRATORY.																	
Apnea	2	2	2	2	...	...	...	...	2	2	...	...	...	...	...	...	4
Asthma	16	7	10	6	6	1	...	...	3	1	12	5	1	...	...	1	23
Bronchitis	152	114	137	110	13	4	2	...	99	71	37	23	14	17	2	3	266
Catarrh	9	7	9	6	...	1	...	...	3	4	6	...	...	2	...	1	16
Emphysema	4	2	4	2	...	...	...	...	1	...	3	2	...	...	...	...	6
Empyema	1	1	1	1	...	...	...	...	...	...	1	1	...	...	...	...	2
Hæmoptysis	16	16	16	14	...	2	...	...	5	7	5	6	4	3	2	...	32
Hydrothorax	5	5	5	2	...	3	...	...	2	1	2	3	1	1	...	...	10
Influenza	1	1	1	1	...	...	...	...	...	1	1	...	...	...	...	...	2

TABLE No. II—Class Three—Local Diseases—Continued.

CLASS THREE—LOCAL DISEASES.	Total.		Nationality.						Social Relations.								
	Males.	Females.	American.		Foreign.		Not Reported.		Single.		Married.		Wid'rs.	Widows.	Not Reported.		Total.
			M.	F.	M.	F.	M.	F.	M.	F.	M.	F.			M.	F.	
Order Three—Respiratory—Cont.																	
Laryngitis	22	21	21	19	1	2	...	...	14	15	8	6	...	...	...	...	43
Lungs, abscess of	11	10	10	10	1	...	...	...	7	6	4	4	...	...	...	...	21
Lungs, congestion of	86	62	75	57	9	5	2	...	44	31	32	22	9	9	1	...	148
Lungs, disease of	7	5	6	4	1	1	...	...	4	1	1	3	2	1	...	...	12
Lungs, hepitization of	3	...	3	...	...	...	...	...	...	...	3	...	...	...	...	...	3
Lungs, œdema of	1	...	...	...	1	...	...	...	...	...	...	...	1	...	...	...	1
Pharyngitis	5	...	5	...	...	...	...	...	4	...	1	...	...	...	...	...	5
Pleuritis	9	7	8	5	1	1	...	1	5	2	2	4	2	1	...	...	16
Pneumonitis	670	547	583	484	75	59	12	4	345	254	264	196	50	88	11	9	1217
Pneumonitis-broncho	5	12	4	11	1	1	...	...	4	10	1	2	...	...	...	...	17
Pneumonitis-pleuro	24	15	21	15	3	...	...	...	9	6	12	5	1	3	2	1	39
Pneumonitis-typho	32	26	28	24	2	1	2	1	15	14	13	7	3	5	1	...	58
Throat disease	4	3	4	3	...	...	...	...	2	1	2	2	...	...	...	...	7
Total	1085	863	953	776	114	81	18	6	568	427	410	291	88	130	19	15	1948
Order Four—Digestive.																	
Abdomen, tumor of	...	2	...	2		...	...	...	...	...	...	1	...	1	...	...	2
Bowels, abscess of	...	1	...	1	...	...	...	...	...	1	...	...	...	...	...	...	1
Bowels, catarrh of	...	1	...	1	...	...	...	...	...	1	...	...	...	...	...	...	1
Bowels, congestion of	31	25	30	24	1	1	...	...	23	16	6	1	2	7	...	1	56
Bowels, hemorrhage of	6	14	5	13	...	...	1	1	1	7	5	3	...	4	...	...	20
Bowels, obstruction of	26	16	21	14	2	2	3	...	12	5	14	6	...	5	...	...	42
Bowels, rupture of	1	...	1	...	...	...	...	...	1	...	...	...	...	...	...	...	1
Bowels, ulceration of	3	2	3	...	...	2	...	...	1	...	2	1	...	1	...	...	5
Colic	6	3	5	3	1	...	...	...	3	...	3	3	...	...	...	...	9
Colitis	5	4	5	4	...	...	...	...	4	3	1	1	...	...	...	...	9
Dyspepsia	12	11	10	11	...	...	2	...	5	5	6	5	1	1	...	...	23
Enteritis	113	94	101	88	11	6	1	...	90	62	19	19	3	9	1	4	207
Gall stones	5	2	5	2	...	...	...	...	2	...	3	...	...	2	...	...	7
Gastritis	41	44	37	43	3	1	1	...	23	17	16	17	2	10	...	...	85

Gastro-enteritis	23	23	22	23	1	...	...	...	18	16	4	5	...	2	1	...	46
Glossitis	...	1	...	1	...	...	...	...	...	1	...	...	...	...	...	...	1
Hæmatemesis	4	1	2	1	2	...	...	...	1	...	3	1	...	...	...	...	5
Hepatitis	22	24	18	23	2	1	2	...	8	7	10	10	2	6	2	1	46
Hernia	12	13	9	9	3	3	...	1	5	1	2	9	5	3	...	...	25
Intussusception	16	8	11	6	5	2	...	...	12	4	4	3	...	1	...	...	24
Jaundice	13	15	12	15	1	...	...	...	4	7	7	4	2	4	...	...	28
Liver, abscess	11	11	9	11	1	...	1	...	1	6	8	4	2	1	...	...	22
Liver, atrophy	1	4	1	4	...	...	...	...	...	1	1	2	...	1	...	...	5
Liver, cirrhosis	21	5	16	4	5	1	...	...	1	...	17	2	3	3	...	...	26
Liver, congestion	15	10	13	9	2	...	...	1	4	1	10	8	1	...	...	1	25
Liver, disease	20	17	19	14	1	3	...	...	10	3	10	12	...	2	...	...	37
Liver, fatty	2	...	1	...	1	...	...	...	...	...	2	...	...	...	...	...	2
Liver, hypertrophy	4	6	4	4	...	2	...	...	...	1	4	5	...	...	...	...	10
Liver, schlerosis	1	...	1	...	...	...	...	...	...	...	1	...	...	...	...	...	1
Mesenteric glands, disease of	...	1	...	1	...	...	...	...	...	...	...	1	...	...	...	...	1
Peritonitis	44	77	40	69	4	5	...	3	24	15	17	56	3	5	...	1	121
Rectum, disease of	...	2	...	2	...	...	...	...	...	1	...	...	...	1	...	...	2
Spleen, disease of	2	2	2	2	...	...	...	...	1	2	1	...	...	...	...	...	4
Stomach, catarrh of	5	4	5	4	...	...	...	...	2	2	3	2	...	...	...	...	9
Stomach, congestion of	22	18	22	15	...	3	...	...	13	7	7	5	1	6	1	...	40
Stomach, disease of	1	2	1	2	...	...	...	...	...	1	1	1	...	...	...	...	3
Stomach, hemorrhage of	2	...	2	...	...	...	...	...	...	...	2	...	...	...	...	...	2
Stomach, ulceration of	17	12	14	12	3	...	...	...	...	3	16	7	1	2	...	...	29
Stomatitis	3	3	3	3	...	...	...	...	2	2	1	1	...	...	...	...	6
Tonsilitis	10	7	10	7	...	...	...	...	10	7	...	...	...	...	...	...	17
Typhlitis	...	1	...	1	...	...	...	...	...	1	...	...	...	...	...	...	1
Total	520	486	460	448	49	32	11	6	281	206	206	195	28	77	5	8	1006
ORDER FIVE—URINARY.																	
Albuminuria	11	7	10	6	..	1	1	...	2	2	6	5	3	...	...	...	18
Calculus	3	...	2	...	...	...	1	...	2	...	1	...	...	...	...	...	3
Cystitis	48	5	41	3	4	2	3	...	9	3	26	1	11	1	2	...	53
Diabetes	31	19	27	17	4	2	...	...	11	7	13	9	6	3	1	...	50
Hæmaturia	2	1	2	1	...	...	...	...	1	1	...	...	1	...	...	...	3
Kidneys, disease of	14	11	12	10	2	1	...	...	6	4	8	6	...	1	...	...	25
Nephria	78	42	65	34	11	7	2	1	11	11	58	20	7	9	2	2	120
Nephritis	45	30	38	24	7	5	...	1	23	17	18	7	4	6	...	...	75
Prostatitis	4	...	4	...	...	...	...	...	...	...	2	...	2	...	...	...	4
Uræmia	29	21	25	19	3	1	1	1	11	7	13	9	5	5	...	...	50
Urethra, stricture of	2	...	2	...	...	...	...	...	1	...	1	...	...	...	...	...	2
Urine, retention of	3	...	3	...	...	...	...	...	1	...	2	...	...	...	...	...	3
Urine, suppression of	1	1	1	1	...	...	...	...	1	...	..	...	...	1	...	...	2
Total	271	137	232	115	31	19	8	3	79	52	148	57	39	26	5	2	408

TABLE No. II—CLASS THREE—LOCAL DISEASES—Continued.

CLASS THREE—LOCAL DISEASES.	TOTAL.		NATIONALITY.						SOCIAL RELATIONS.								
	Males.	Females.	American.		Foreign.		Not Reported.		Single.		Married.		Widowers.	Widows.	Not Reported.		Total.
			M.	F.	M.	F.	M.	F.	M.	F.	M.	F.			M.	F.	
ORDER SIX—GENERATIVE.																	
Metritis	...	20	...	17	...	3	...	...	...	4	...	15	...	1	...	...	20
Ovarian tumor	...	11	...	10	...	...	...	1	...	3	...	5	...	3	...	...	11
Ovaritis	...	3	...	3	...	...	...	...	...	...	...	3	...	...	...	...	3
Uterus, disease of	...	3	...	2	...	1	...	...	...	...	...	3	...	...	...	...	3
Uterus, rupture of	...	2	...	2	...	...	...	...	...	...	...	2	...	...	...	...	2
Uterus, tumor of	...	2	...	2	...	...	...	...	...	...	...	2	...	...	...	...	2
Total	...	41	...	36	...	4	...	1	...	7	...	30	...	4	...	...	41
ORDER SEVEN—OSSEOUS AND LOCOMOTARY																	
Ostitis	1	...	1	...	...	...	...	...	...	...	1	...	...	...	...	...	1
Total	1	...	1	...	...	...	...	...	...	...	1	...	...	...	...	...	1
ORDER EIGHT—INTEGUMENTARY.																	
Abscess	10	7	8	6	2	1	...	...	3	3	6	4	1	...	...	...	17
Cellulitis	...	2	...	2	...	...	...	...	...	1	...	1	...	...	...	...	2
Lupus	1	...	1	...	...	...	...	...	1	...	...	...	...	...	...	...	1
Total	11	9	9	8	2	1	...	...	4	4	6	5	1	...	...	...	20
ORDER NINE—MISCELLANEOUS.																	
Otitis	2	1	2	1	...	...	...	...	2	1	...	...	...	...	...	...	3
Rhinitis	1	...	1	...	...	...	...	...	1	...	...	...	...	...	...	...	1
Tumor	9	6	9	4	...	1	...	1	4	1	4	5	1	...	...	...	15
Total	12	7	12	5	...	1	...	1	7	2	4	5	1	...	...	...	19
Total Local Diseases	3256	2708	2887	2450	304	217	65	41	1679	1328	1249	903	268	438	60	39	5964

TABLE No. II—Continued.

CLASS FOUR—DEVELOPMENTAL DISEASES.

Causes of Death, Number of Males and Females, Nationality and Social Relations, for the Year Ending September 30, 1885.

CLASS FOUR—DEVELOPMENTAL DISEASES.	TOTAL.		NATIONALITY.						SOCIAL RELATIONS.								Total.
	Males.	Females.	American.		Foreign.		Not Reported.		Single.		Married.		Widowers.	Widows.	Not Reported.		
			M.	F.	M.	F.	M.	F.	M.	F.	M.	F.			M.	F.	
ORDER ONE—CHILDREN.																	
Atelectasis	5	2	5	2	...	...	...	...	5	2	...	...	...	...	...	...	7
Birth, premature	153	108	153	108	...	...	...	...	153	108	...	...	...	...	...	...	261
Child birth, accidental	8	3	8	3	...	...	...	...	8	3	...	...	...	...	...	...	11
Craniotomy	2	1	2	1	...	...	...	...	2	1	...	...	...	...	...	...	3
Cyanosis	42	21	42	21	...	...	...	...	42	21	...	...	...	...	...	...	63
Debility	20	17	20	17	...	...	...	...	20	17	...	...	...	...	...	...	37
Dentition	9	2	9	2	...	...	...	...	9	2	...	...	...	...	...	...	11
Malformation	10	11	10	11	...	...	...	...	10	11	...	...	...	...	...	...	21
Malnutrition	13	3	13	3	...	...	...	...	13	3	...	...	...	...	...	...	16
Nursing sore mouth	...	1	...	1	...	...	...	...	...	1	...	...	...	...	...	...	1
Prolapsis funis	...	2	...	2	...	...	...	...	...	2	...	...	...	...	...	...	2
Umbilical hemorrhage	6	3	6	3	...	...	...	...	6	3	...	...	...	...	...	...	9
Total	268	174	468	174	...	...	...	...	268	174	...	...	...	...	...	...	442
ORDER TWO—WOMEN.																	
Amenorrhœa	...	1	...	1	...	...	...	...	...	1	...	...	...	...	...	...	1
Cæsarean section	...	1	...	1	...	...	...	...	...	...	...	1	...	...	...	...	1

TABLE No. II—Class Four—Developmental Diseases—Continued..

CLASS FOUR—DEVELOPMENTAL DISEASES.	Total.		Nationalty.						Social Relations.								
			American.		Foreign.		Not Reported.		Single.		Married.				Not Reported.		
	Males.	Females.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Widowers.	Widows.	M.	F.	Total.
Order Two—Women—Continued.																	
Climacteria	....	1	...	1	...	...	...	...	...	...	...	1	....	....	...	...	1
Ovariotomy	....	1	...	1	...	...	...	...	...	1	...	...	....	....	...	...	1
Parturition	....	21	...	16	...	2	...	3	...	1	...	20	....	....	...	...	21
Phlegmatia dolens	....	1	...	1	...	...	...	...	...	...	...	1	....	....	...	...	1
Placenta previa	....	4	...	3	...	1	...	...	...	...	...	4	....	....	...	...	4
Post partum hem.	....	6	...	4	...	1	...	1	...	...	...	6	....	....	...	...	6
Pueperal eclampsia	....	45	...	44	...	1	...	...		8	...	37	....	....	...	...	45
Uterine hemorrhage	....	8	...	7	...	1	...	...	...	7	...	...	....	....	...	1	8
Total	....	89	...	79	...	6	...	4	...	18	...	70	....	....	...	1	89
Order Three—Old Age.																	
Old Age	172	214	129	165	34	38	9	11	23	17	78	44	60	133	11	20	386
Total	172	214	129	165	34	38	9	11	23	17	78	44	60	133	11	20	386
Order Four—Nutrition.																	
Asthenia	5	7	3	6	1	1	1	...	2	2	3	3	...	2	...	...	12
Debility	76	75	68	60	7	11	1	4	10	6	46	17	20	48	..	4	151
Exhaustion	22	22	15	19	5	3	2	...	7	7	12	12	2	1	1	2	44
Marasmus	36	19	33	18	3	1	...	...	29	16	3	...	4	3	...	...	55
Total	139	123	119	103	16	16	4	4	48	31	64	32	26	54	1	6	262
Total Developmental Diseases	579	600	516	521	50	60	13	19	339	240	142	146	86	187	12	27	1179

TABLE No. II—Continued.

CLASS FIVE—ACCIDENTS, NEGLIGENCE AND VIOLENCE.

Causes of Death, Number of Males and Females, Nationality and Social Relations, for the Year Ending September 30, 1885.

CLASS FIVE—ACCIDENTS, NEGLIGENCE AND VIOLENCE.	TOTAL.		NATIONALITY.						SOCIAL RELATIONS.								
			American.		Foreign.		Not Reported.		Single.		Married.				Not Reported.		
	Males.	Females.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Widowers.	Widows.	M.	F.	Total.
ORDER ONE—ACCIDENTS AND NEGLIGENCE.																	
Abortion	...	4	...	3	...	...	...	1	...	1	...	3	...	...	...	...	4
Accident	133	36	107	29	16	3	10	4	74	15	44	10	5	7	10	4	169
Asphyxia	17	19	17	18	...	...	...	1	16	17	1	1	...	1	...	...	36
Boiler explosion	11	...	8	...	1	...	2	...	6	...	3	...	1	...	1	...	11
Brain concussion	11	1	11	1	...	...	...	...	4	1	6	...	1	...	...	...	12
Burn	16	35	14	33	...	1	2	1	13	25	2	6	1	4	...	...	51
Buzz saw	1	...	1	...	...	...	...	...	1	...	...	...	...	...	...	...	1
Choking	1	...	1	...	...	...	...	...	1	...	...	...	...	...	...	...	1
Coal mine	1	...	1	...	...	...	...	...	...	...	1	...	...	...	...	...	1
Drowning	52	10	36	8	6	2	10	...	38	5	8	4	...	1	6	...	62
Exposure to cold	6	...	5	...	1	...	...	...	2	...	3	...	1	...	...	...	6
Fall	13	9	10	7	2	2	1	...	5	3	6	1	1	5	1	...	22
Falling log	1	...	1	...	...	...	...	...	1	...	...	...	...	...	...	...	1
Falling tree	4	...	4	...	...	...	...	...	2	...	1	...	1	...	...	...	4
Fracture of femur	3	8	2	7	1	...	...	1	...	1	3	1	...	6	...	...	11
Fracture of hip	...	1	...	1	...	...	...	...	...	...	...	...	...	1	...	...	1
Fracture of neck	3	...	3	...	...	...	...	...	1	...	...	...	2	...	...	...	3
Fracture of skull	4	...	3	...	1	...	...	...	2	...	2	...	...	...	...	...	4

TABLE No. II—CLASS FIVE—ACCIDENTS, ETC.—Continued.

CLASS FIVE—ACCIDENTS, NEGLIGENCE AND VIOLENCE.	TOTAL.		NATIONALITY.						SOCIAL RELATIONS.								
	Males.	Females.	American.		Foreign.		Not Reported.		Single.		Married.		Widowers.	Widows.	Not Reported.		Total.
			M.	F.	M.	F.	M.	F.	M.	F.	M.	F.			M.	F.	
ORDER ONE—ACCIDENTS AND NEGLIGENCE—Continued.																	
Fracture of thigh	....	1	...	1	...	...	...	...	...	...	...	...	....	1	...	...	1
Injury of head	1	1	1	1	...	...	...	...	...	1	1	...	....	....	...	...	2
Insolation	3	....	2	...	...	...	1	...	...	...	2	...	....	....	1	...	3
Kicked by a horse	1	....	1	...	...	...	...	...	1	...	...	...	....	....	...	...	1
Kicked by a mule	1	....	1	...	...	...	...	...	1	...	...	...	....	....	...	...	1
Laudanum	....	1	...	1	...	...	...	...	...	...	...	...	....	1	...	...	1
Lightning	5	3	5	2	...	...	...	1	4	1	1	1	....	1	...	...	8
Morphine	4	4	3	4	1	...	...	...	2	3	2	...	....	1	...	...	8
Opium	2	2	2	1	...	...	...	1	2	2	...	...	....	....	...	...	4
Poison	13	5	11	4	2	1	...	...	6	...	7	5	....	....	...	...	18
Railroad	95	8	59	7	20	1	16	...	49	4	26	3	6	1	14	...	103
Runaway team	1	1	1	1	...	...	...	...	...	...	1	1	....	....	...	...	2
Scald	7	5	7	5	...	...	...	...	7	5	...	...	....	....	...	...	12
Shock	2	2	2	2	...	...	...	...	...	1	2	1	....	....	...	...	4
Shooting	55	3	49	3	4	...	2	...	34	2	14	...	2	1	5	...	58
Strangulation	1	1	1	1	...	...	...	...	1	1	...	...	....	....	...	...	2
Strychnine	1	....	...	...	1	...	...	...	...	...	...	...	1	....	...	...	1
Suffocation	8	3	8	3	...	...	...	...	5	3	3	...	....	....	...	...	11
Total	477	163	377	143	56	10	44	10	278	91	139	37	22	31	38	4	640
ORDER TWO—JUDICIAL EXECUTION.																	
Hanging	1	....	1	...	...	...	...	...	...	...	...	...	1	....	...	...	1
Total	1	....	1	...	...	...	...	...	...	...	...	...	1	....	...	...	1
ORDER THREE—HOMOCIDE.																	
Homocide	19	6	15	3	1	2	3	1	6	1	10	4	1	....	2	1	25
Total	19	6	15	3	1	2	3	1	6	1	10	4	1	....	2	1	25

ORDER FOUR—SUICIDE.																	
Arsenic	1	....	1	...	...	...	...	...	1	...	...	..	....	....	...	...	1
Drowning	4	1	2	1	2	...	...	...	1	...	3	1	....	....	...	...	5
Hanging	15	3	10	3	2	...	3	...	2	..	10	3	1	....	2	...	18
Laudanum	....	1	...	1	...	...	...	...	...	1	...	...	....	....	...	...	1
Morphine	4	2	2	2	2	...	...	...	1	1	2	1	1	....	...	...	6
Poison	4	....	4	...	...	...	...	...	...	..	4	...	...	....	...	...	4
Shooting	9	....	7	...	1	...	1	...	2	..	6	...	1	....	...	...	9
Strychnine	....	2	...	2	...	...	...	...	...	2	...	...	....	....	...	...	2
Suicide	47	17	36	14	8	3	3	...	13	7	30	7	2	3	2	...	64
Total	84	26	62	23	15	3	7	..	20	11	55	12	5	3	4	...	110
Total Accidents, Violence & Negli'ce	581	195	455	169	72	15	54	11	304	103	204	53	29	34	44	5	776
Unknown	183	153	160	132	11	10	12	11	111	98	42	28	8	14	22	13	336
Total	183	153	160	132	11	10	12	11	111	98	42	28	8	14	22	13	336
RECAPITULATION.																	
Zymotic Diseases	2206	2169	2081	2052	103	93	22	24	1713	1545	418	489	60	114	15	21	4375
Constitutional Diseases	1310	1663	1141	1528	132	98	37	37	545	576	626	829	86	221	53	37	2973
Local Diseases	3256	2708	2887	2450	304	217	65	41	1679	1328	1249	903	268	438	60	39	5964
Developmental Diseases	579	600	516	521	50	60	13	19	339	240	142	146	86	187	12	27	1179
Accidents, Negligence and Violence	581	195	455	169	72	15	54	11	304	103	204	53	29	34	44	5	776
Unknown	183	153	160	132	11	10	12	11	111	98	42	28	8	14	22	13	336
Total	8115	7488	7240	6852	672	493	203	143	4691	3890	2681	2448	537	1008	206	142	*15603

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* Still births not included.

TABLE

CLASS ONE—

Causes of Death, Number of Males and Females, Grouped

CLASS ONE—ZYMOTIC DISEASES.	GROUPED													
	Under 1 Year.		1 to 5		5 to 10		10 to 15		15 to 20		20 to 30		30 to 40	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
ORDER ONE—MIASMATIC.														
Anthrax	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	1	. .	. .	
Cholera infantum	235	216	72	97	2	1	. .	. .	. .	. .	. .	. .	. .	. .
Cholera morbus	3	1	. .	5	. .	. .	. .	. .	. .	. .	1	1	2	. .
Congestive chill	3	3	2	1	. .	2	. .	. .	1	2	2	. .	2	3
Croup	31	31	89	67	25	21	1	2	. .	. .	1	. .	. .	. .
Diarrhœa	35	29	22	15	6	2	. .	. .	. .	. .	1	2	2	1
Diphtheria	18	17	105	79	66	56	18	24	2	6	3	6	1	1
Dysentery	26	22	53	25	6	5	4	1	6	4	6	12	1	3
Entero-colitis	20	11	15	14	. .	1	1	. .	. .	1	. .	. .	. .	. .
Erysipelas	8	8	3	1	2	. .	1	. .	1	. .	. .	2	. .	3
Fever, bilious	. .	. .	. .	. .	. .	1	3	. .	. .	2	. .	2	. .	. .
Fever, catarrhal	14	4	5	2	3	. .	. .	. .	. .	. .	4	2	. .	2
Fever, cerebro-spinal	17	20	20	26	10	5	8	5	6	3	9	11	1	5
Fever, congestive	3	. .	2	1	. .	1	1	. .	1	1	2	1	. .	2
Fever, continued	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	1	. .	. .	. .
Fever, intermittent	2	. .	1	1	1	. .	1	. .	. .	1	2	. .	. .	1
Fever, malarial	12	8	10	13	5	2	. .	5	1	4	6	10	9	7
Fever, pernicious	. .	. .	1	. .	2	2	1	. .	2	1	2	1	2	2
Fever, puerperal	. .	. .	. .	. .	. .	. .	. .	1	. .	6	. .	47	. .	29
Fever, relapsing	. .	. .	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
Fever, remittent	7	3	3	5	2	1	3	. .	2	4	1	4	1	. .
Fever, scarlet	14	9	52	53	18	25	8	8	4	1	1	1	. .	. .
Fever, traumatic	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
Fever, typhoid	2	5	15	26	23	22	21	38	46	82	106	77	54	43
Fever, typho-malarial	8	. .	12	8	8	4	7	6	15	17	17	15	2	6
Gangrene	1	. .	. .	1	. .	. .	. .	. .	. .	. .	3	. .	2	1
Measles	11	17	25	23	6	6	5	10	2	6	4	5	. .	5
Milk sickness	. .	. .	1	. .	2	. .	. .	. .	. .	. .	. .	1	. .	1
Mumps	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
Pertussis	24	23	9	15	. .	3	. .	. .	. .	. .	. .	. .	. .	. .
Puerperal peritonitis	. .	. .	. .	. .	. .	. .	. .	. .	. .	1	. .	5	. .	6
Puerperal septæmia	. .	. .	. .	. .	. .	. .	. .	. .	. .	5	. .	9	. .	6
Pyæmia	1	. .	1	1	. .	. .	2	1	2	3	2	5	2	5
Septæmia	. .	2	2	1	. .	1	. .	1	. .	4	4	16	3	13
Small-pox	. .	. .	1	1	. .	1	. .	. .	. .	1	2	2	. .	. .
Total	496	429	522	481	187	162	85	102	91	155	181	237	84	145
ORDER TWO—ENTHETIC.														
Glanders	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
Syphilis, acquired	. .	. .	. .	. .	. .	. .	. .	1	. .	2	1	4	5	4
Syphilis, canstitutional	8	3	. .	1	1	. .	. .	. .	. .	. .	. .	. .	. .	. .
Total	8	3	. .	1	1	. .	. .	1	. .	2	1	4	5	4
ORDER THREE—DIETIC.														
Delirium tremens	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	2	. .
Eczema	2	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
Inanition	112	106	8	9	6	6	1	2	4	. .	1	5	2	1
Intemperance	. .	. .	. .	. .	1	. .	. .	. .	. .	. .	. .	. .	7	. .
Purpura	4	. .	1	. .	.	1	. .	. .	. .	. .	. .	1	. .	. .
Urticaria	. .	. .	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
Total	118	107	10	9	7	7	1	2	4	. .	1	6	11	1
ORDER FOUR—PARASITIC.														
Aphtha	5	3	1	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
Total	5	3	1	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
Total Zymotic Diseases	627	542	533	492	195	169	86	105	95	157	183	247	100	150

No. III.

ZYMOTIC DISEASES.

Ages, for the Year Ending September 30, 1885.

AGES.																Males.	Females.	Total.
40 to 50		50 to 60		60 to 70		70 to 80		80 to 90		90 to 100		Over 100		Not Rept'ed				
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.			
1	. .	1	. .	. .	. .	2	. .	. .	. .	. .	. .	. .	. .	1	. .	6	. . . .	6
. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	3	1	312	315	627
2	3	1	2	2	. .	2	7	. .	2	. .	. .	. .	. .	. .	. .	13	21	34
2	3	2	5	. .	3	2	. .	. .	1	. .	. .	. .	. .	. .	. .	16	23	39
. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	1	2	148	123	271
4	2	11	4	5	3	6	5	2	3	. .	. .	. .	. .	3	. .	97	66	163
1	1	. .	. .	1	1	2	. .	. .	. .	. .	. .	. .	. .	2	1	219	192	411
8	7	5	8	10	9	4	9	1	2	. .	. .	. .	. .	1	1	131	108	239
. .	. .	. .	1	. .	2	. .	. .	. .	. .	1	. .	. .	. .	. .	1	37	31	68
5	.	4	3	2	3	3	2	1	. .	. .	. .	. .	. .	. .	. .	30	22	52
1	. .	1	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	5	6	11
. .	. .	. .	1	. .	. .	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	27	11	38
1	4	3	2	. .	2	. .	. .	. .	. .	. .	. .	. .	. .	1	1	76	84	160
. .	. .	2	. .	1	. .	1	. .	1	. .	. .	. .	. .	. .	. .	. .	14	6	20
. .	. .	. .	. .	. .	. .	. .	. .	1	. .	. .	. .	. .	. .	. .	. .	2	. . . .	2
. .	2	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	8	5	13
7	7	7	3	6	. .	. .	5	1	1	. .	. .	. .	. .	2	1	66	66	132
. .	2	3	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	13	9	22
. .	3	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	2	. . . .	88	88
. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	1	. . . .	1
4	3	1	4	. .	. .	. .	2	. .	. .	. .	. .	. .	. .	. .	. .	24	26	50
. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	1	97	98	195
. .	. .	. .	. .	. .	. .	. .	1	. .	. .	. .	. .	. .	. .	. .	. .	. . . .	1	1
35	25	29	9	21	24	10	7	3	3	. .	. .	. .	. .	14	8	379	369	748
7	4	3	8	6	6	3	3	3	. .	. .	. .	. .	. .	5	3	96	80	176
1	. .	3	. .	4	1	7	4	3	2	. .	. .	. .	. .	. .	. .	24	9	33
2	4	. .	. .	1	. .	1	2	. .	. .	. .	. .	. .	. .	3	3	60	81	141
. .	. .	. .	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	1	3	4	7
. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	1	. . . .	1
. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	2	33	43	76
. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. . . .	12	12
. .	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. . . .	21	21
2	2	6	1	. .	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	18	19	37
5	5	1	5	2	1	2	. .	. .	. .	1	. .	. .	. .	1	1	21	50	71
3	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	6	6	12
91	79	84	59	61	56	46	47	16	14	2	. .	. .	. .	37	29	1983	1995	3978
. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	1	. .	1	. . . .	1
1	3	2	1	2	. .	. .	1	. .	. .	. .	. .	. .	. .	. .	. .	11	16	27
. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	9	4	13
1	3	2	1	2	. .	. .	1	. .	. .	. .	. .	. .	. .	1	. .	21	20	41
2	. .	1	. .	. .	. .	1	. .	. .	. .	. .	. .	. .	. .	2	. .	8	. . . .	8
. .	. .	. .	. .	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	3	1	4
2	1	4	2	4	6	5	6	3	1	. .	. .	. .	. .	3	. .	155	145	300
6	. .	6	. .	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	2	. .	23	. . . .	23
. .	. .	. .	. .	. .	. .	. .	. .	1	1	. .	. .	. .	. .	. .	1	6	4	10
. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	1	. . . .	1
10	1	11	2	6	6	6	6	4	2	. .	. .	. .	. .	7	1	196	150	346
. .		. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	6	4	10
. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	6	4	10
102	83	97	62	69	62	52	54	20	16	2	. .	. .	. .	45	30	2206	2169	4375

TABLE No

CLASS THREE—CON

Causes of Death, Number of Males and Females, Grouped

CLASS TWO—CONSTITUTIONAL DISEASES.	GROUPED													
	Under 1 Year.		1 to 5.		5 to 10.		10 to 15.		15 to 20.		20 to 30.		30 to 40.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
ORDER ONE—DIATHETIC.														
Anæmia	4	5	1	3	. .	. .	. .	. .	. .	5	3	7	. .	4
Anasarca	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	1
Ascites	. .	. .	. .	. .	1	. .	. .	. .	. .	. .	. .	. .	. .	. .
Cancer	. .	. .	2	. .	. .	. .	1	. .	1	. .	6	5	6	6
Cancer, breast	. .	. .	. .	. .	. .	. .	. .	. .	. .	1	. .	1	. .	1
Cancer, face	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
Cancer, liver	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	3	1	1	1
Cancer, rectum	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	1	. .
Cancer, stomach	. .	. .	. .	. .	1	. .	. .	. .	1	. .	3	2	2	1
Cancer, uterus	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	6	. .	2
Cancer, vertebræ	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
Chlorosis	. .	. .	. .	. .	. .	1	. .	1	. .	4	. .	3	. .	. .
Dropsy	2	1	3	3	2	2	. .	2	2	4	4	3	9	6
Goitre	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
Heart, rheumatism	. .	. .	1	. .	. .	. .	. .	1	. .	. .	1	. .	1	. .
Leucocythæma	. .	. .	1	. .	. .	. .	. .	. .	2	1	1	3	. .	3
Lymphadenoma	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	1	. .	. .
Rheumatism	1	2	1	. .	1	2	2	1	4	4	2	2	5	2
Total	8	8	9	6	5	5	3	6	10	19	23	34	25	27
ORDER TWO—TUBERCULAR.														
Abscess	. .	. .	1	. .	. .	. .	. .	1	. .	. .	1	2	. .	2
Hydrocephalus	12	10	12	6	1	1	. .	. .	. .	. .	. .	1	. .	. .
Meningitis, tub	16	23	24	19	6	3	1	2	. .	3	2	1	. .	3
Morbus coxarius	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	1	. .	. .	1
Phthisis, pulmonalis	16	15	18	17	7	15	15	33	58	151	262	372	182	207
Pott's disease	. .	. .	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
Rachitis	. .	. .	. .	2	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
Scrofula	6	9	7	12	7	2	. .	6	4	1	. .	7	1	1
Tabes mesenterica	4	2	3	2	1	1	. .	. .	. .	3	4	1	4	1
Total	54	59	66	58	22	22	16	42	62	158	270	384	187	215
Total Constitutional Diseases	62	67	75	64	27	27	19	48	72	177	293	418	212	242

III—Continued.

STITUTIONAL DISEASES.

Ages, for the Year Ending September 30, 1885.

Ages.																Males.	Females.	Total.
40 to 50.		50 to 60.		60 to 70.		70 to 80.		80 to 90.		90 to 100		Over 100		Not Rept'd.				
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.			
. .	5	1	1	1	. .	. .	2	. .	. .	. .	. .	. .	. .	. .	1	10	33	43
. .	. .	. .	1	. .	1	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	1	3	4
. .	. .	2	2	1	1	. .	. .	1	. .	. .	. .	. .	. .	. .	. .	5	3	8
4	19	5	9	8	17	9	8	5	8	. .	. .	. .	. .	1	5	48	77	125
. .	4	. .	2	1	5	. .	2	. .	. .	. .	. .	. .	. .	. .	. .	1	16	17
. .	. .	2	. .	. .	1	2	1	. .	. .	. .	. .	. .	. .	1	. .	5	2	7
3	2	3	3	5	1	1	3	. .	1	1	. .	. .	. .	. .	. .	17	12	29
. .	. .	1	. .	. .	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	2	1	3
2	5	4	8	9	7	6	4	1	1	. .	. .	. .	. .	1	1	30	29	59
. .	11	. .	6	. .	4	. .	2	. .	. .	. .	. .	. .	. .	. .	. .	. . . .	31	31
1	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	1	. . . .	1
. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	1	1	1	10	11
6	6	12	14	18	12	7	15	3	2	. .	. .	. .	. .	5	1	73	71	144
. .	2	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. . . .	2	2
. .	. .	. .	2	. .	. .	1	. .	. .	. .	. .	. .	. .	. .	1	. .	5	3	8
1	. .	1	. .	. .	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	1	6	10	16
1	. .	. .	. .	. .	1	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	3	2	5
3	7	8	3	1	3	1	2	. .	. .	. .	. .	. .	. .	1	. .	30	28	58
21	61	39	51	44	55	29	39	10	12	1	. .	. .	. .	11	10	238	333	571
. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	2	5	7
. .	2	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	1	1	26	21	47
. .	. .	1	. .	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	2	1	53	55	108
. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	1	1	2
133	128	94	85	74	59	38	36	6	15	1	5	. .	. .	38	50	942	1188	2130
. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	1	. . . .	1
. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. . . .	2	2
1	2	. .	. .	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	1	2	28	42	70
1	2	1	1	1	1	. .	1	. .	1	. .	. .	. .	. .	. .	. .	19	16	35
135	134	96	86	77	60	38	37	6	16	1	5	. .	. .	42	54	1072	1330	2402
156	195	135	137	121	115	67	76	16	28	2	5	. .	. .	53	64	1310	1663	2973

TABLE NO.

CLASS THREE—

Causes of Death, Number of Males and Females,

CLASS THREE—LOCAL DISEASES.	GROUPED													
	Under 1 Year.		1 to 5.		5 to 10.		10 to 15.		15 to 20.		20 to 30.		30 to 40.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
ORDER ONE—NERVOUS.														
Apoplexy	5	1	2	1	. .	. .	. .	5	4	1	9	3	7	9
Arachnitis	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
Brain, abscess	. .	1	. .	. .	. .	2	. .	. .	1	1	3	1	1	1
Brain, anæmia	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
Brain, congestion	32	30	34	30	4	6	5	1	7	4	11	6	2	4
Brain, disease	10	5	10	4	1	. .	3	2	2	2	5	3	3	2
Brain, effusion	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
Brain, fever	7	6	3	9	1	1	. .	1	. .	. .	1	1	. .	. .
Brain, hyperæmia	. .	1	. .	1	. .	. .	. .	. .	. .	1	. .	. .	. .	. .
Brain, softening	. .	1	. .	. .	. .	. .	. .	. .	. .	. .	1	. .	1	. .
Brain, tumor	. .	. .	. .	. .	. .	. .	1	. .	. .	. .	. .	1	. .	. .
Caries of spine	. .	. .	. .	. .	. .	. .	. .	. .	1	. .	2	. .	. .	. .
Cerebritis	27	22	20	27	2	5	5	3	1	3	6	4	2	3
Chorea	1	1	. .	. .	. .	1	. .	1	. .	2	. .	. .	. .	. .
Convulsions	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
Convulsions, infantile	117	111	23	21	2	3	2	1	1	. .	. .	. .	. .	. .
Epilepsy	. .	1	. .	. .	1	. .	. .	. .	3	2	4	6	3	. .
Insanity	. .	. .	. .	. .	. .	. .	1	. .	. .	1	5	1	4	3
Locomotor ataxia	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
Meningitis	45	42	40	36	9	15	4	4	5	10	4	7	4	2
Meningitis, cerebral	25	18	17	19	. .	8	3	2	3	3	2	. .	1	. .
Meningitis, spinal	3	5	3	2	. .	1	4	. .	1	. .	. .	3	1	1
Muscular atropy	. .	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
Myelitis	1	. .	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	1	. .
Neuralgia	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
Paralysis	6	5	7	7	2	1	. .	2	. .	. .	6	4	4	7
Spina bifida	11	12	1	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
Spinal schlerosis	. .	. .	. .	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	2
Spine, disease of	. .	. .	. .	1	1	. .	. .	. .	. .	. .	. .	. .	. .	. .
Tetanus	6	. .	. .	1	1	1	. .	. .	3	. .	1	. .	1	. .
Trismus nascentium	8	5	. .	. .	1	. .	. .	. .	. .	. .	1	. .	. .	. .
Total	305	268	161	161	25	44	28	22	32	30	61	40	35	35
ORDER TWO—CIRCULATORY.														
Aneurism	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	1	. .
Angnia pectoris	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	3	3	3	4
Arteritis	. .	. .	. .	. .	. .	. .	. .	1	. .	. .	. .	. .	. .	. .
Congestion	3	4	4	2	. .	. .	2	. .	. .	. .	1	. .	. .	. .
Embolism	. .	. .	. .	. .	. .	1	. .	. .	. .	. .	. .	1	. .	1
Endo-carditis	. .	. .	. .	1	1	. .	. .	. .	. .	1	1	2	. .	. .
Epistaxis	. .	1	. .	. .	1	. .	1	. .	. .	. .	. .	. .	. .	. .
Heart, clot	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	2	. .	1
Heart, dilatation of	. .	. .	. .	. .	1	. .	. .	. .	. .	. .	. .	. .	. .	. .
Heart, disease of	7	1	3	1	4	1	5	2	4	3	15	20	9	12
Heart, fatty	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	1	1	. .
Heart, hypertrophy of	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	1	. .
Heart, paralysis of	2	. .	1	. .	1	. .	. .	. .	. .	. .	1	. .	. .	6
Heart, valvular disease of	. .	1	1	. .	2	2	. .	. .	2	3	1	2	1	3
Hemorrhage	3	2	. .	. .	. .	. .	. .	. .	. .	1	2	3	. .	1
Hydropericardium	. .	. .	. .	. .	. .	1	1	2	. .	. .	. .	. .	. .	3
Pericarditis	. .	. .	1	. .	. .	2	. .	. .	. .	. .	. .	1	1	1
Phlebitis	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	1
Total	15	9	10	4	10	7	9	5	6	8	24	35	17	33

III—Continued.

LOCAL DISEASES.

Grouped Ages, for the Year Ending September 30, 1885.

AGES. 40 to 50.		50 to 60.		60 to 70.		70 to 80.		80 to 90.		90 to 100.		Over 100.		Not Rep'td.		Males.	Females.	Total.
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.			
11	7	22	9	30	10	22	20	14	9	. .	1	. .	. .	4	3	130	79	209
. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	1	. .	1
. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	5	6	11
1	. .	. .	. .	. .	. .	. .	1	. .	. .	. .	. .	. .	. .	. .	. .	1	1	2
5	. .	4	5	4	4	4	3	2	. .	. .	. .	. .	. .	2	. .	116	93	209
1	2	4	. .	1	2	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	41	22	63
1	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	1	. .	1
. .	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	4	. .	16	19	35
. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	3	3
3	2	6	2	11	8	10	1	6	2	. .	. .	. .	. .	. .	. .	38	16	54
1	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	2	1	3
. .	. .	. .	. .	. .	. .	. .	1	. .	. .	. .	. .	. .	. .	. .	. .	3	1	4
. .	3	5	2	1	1	. .	. .	1	1	. .	. .	. .	. .	. .	. .	70	74	144
. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	1	5	6
. .	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	1	1
. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	2	. .	147	136	283
2	1	2	. .	1	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	16	11	27
1	4	3	1	3	. .	2	3	1	2	. .	. .	. .	. .	. .	. .	20	15	35
. .	. .	3	. .	. .	. .	3	. .	. .	. .	. .	. .	. .	. .	. .	. .	6	. .	6
2	. .	2	1	. .	. .	1	1	. .	1	. .	. .	. .	. .	4	2	120	121	241
4	2	. .	1	. .	1	. .	. .	. .	. .	. .	. .	. .	. .	2	. .	57	54	111
. .	. .	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	13	12	25
. .	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	2	2
1	1	. .	. .	. .	. .	. .	1	. .	. .	. .	. .	. .	. .	. .	. .	4	2	6
. .	. .	. .	. .	. .	1	1	2	. .	1	. .	1	. .	. .	. .	. .	1	5	6
7	6	26	25	42	30	33	49	20	21	. .	3	. .	. .	1	2	154	162	316
. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	12	13	25
. .	. .	2	. .	1	. .	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	4	3	7
. .	. .	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	2	1	3
. .	. .	1	. .	1	. .	2	. .	. .	. .	. .	. .	. .	. .	. .	. .	16	2	18
. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	2	1	12	6	18
40	31	82	46	95	58	80	82	44	37	. .	5	. .	. .	21	8	1009	866	1875
. .	. .	1	. .	2	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	4	1	5
. .	. .	4	3	4	5	4	1	1	1	. .	. .	. .	. .	. .	. .	19	17	36
. .	. .	. .	. .	. .	. .	. .	. .	1	. .	. .	. .	. .	. .	. .	. .	1	1	2
2	1	. .	. .	1	1	1	2	. .	. .	. .	. .	. .	. .	. .	. .	14	10	24
. .	. .	1	. .	1	. .	1	1	. .	. .	. .	1	. .	. .	. .	. .	3	5	8
1	. .	3	. .	1	2	1	3	. .	1	. .	. .	. .	. .	. .	. .	8	10	18
. .	. .	. .	. .	. .	. .	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	3	1	4
1	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	1	3	4
. .	1	. .	2	. .	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	1	4	5
15	25	33	17	48	26	31	22	8	9	. .	. .	. .	. .	. .	3	182	142	324
. .	2	2	. .	5	1	4	2	. .	. .	. .	. .	. .	. .	. .	. .	12	6	18
2	. .	. .	. .	4	3	4	1	. .	. .	. .	. .	. .	. .	. .	. .	11	4	15
2	2	. .	6	6	1	5	2	2	. .	. .	. .	. .	. .	. .	1	20	18	38
4	8	3	4	8	8	9	6	2	2	1	. .	. .	. .	4	. .	38	39	77
2	1	. .	. .	. .	1	1	1	. .	. .	. .	. .	. .	. .	. .	. .	8	10	18
1	1	2	. .	4	4	1	4	2	1	. .	. .	. .	. .	. .	1	11	17	28
1	. .	. .	1	4	2	2	. .	2	2	. .	. .	. .	. .	. .	. .	11	9	20
. .	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	2	2
31	42	49	33	88	56	65	45	18	16	1	1	. .	. .	4	5	347	299	646

TABLE No.

CLASS THREE—LOCAL DISEASES.	GROUPED													
	Under 1 Year.		1 to 5		5 to 10		10 to 15		15 to 20		20 to 30		30 to 40	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
ORDER THREE—RESPIRATORY.														
Apnea	2	2												
Asthma	2	1	1								3			
Bronchitis	62	40	24	19	3	4	2	2	2	4	6	13	4	3
Catarrh	2	3	1										1	1
Emphysema												1	1	1
Empyema														
Hæmoptisis		1				1	1	1	2	3	2	3	4	3
Hydro thorax			1			1	1						1	1
Influenza		1												
Laryngitis	3	4	5	7	3	2				1	5	3	1	1
Lungs, abscess	1	1	1	1					1	2	3	3	2	1
Lungs, congestion	22	19	10	5	5	2	4	2	3	2	8	4	5	2
Lungs, disease	3	1									1		1	1
Lungs, hepatization														
Lungs, œdema														
Pharingitis	3		1											
Pleuritis	1			1					1			2	1	2
Pneumonitis	105	102	83	73	30	22	22	22	27	21	69	48	48	53
Pneumonitis, broncho	1	3	1	2				2			1			
Pneumonitis, pleuro	1	3	2	2					2	1	3	2	3	2
Pneumonitis, typho	1	1	2	4		1	2	1	1	1	8	5	1	1
Throat disease					1					1	1		1	1
Total	209	182	132	114	42	33	32	30	39	36	110	84	74	73
ORDER FOUR—DIGESTIVE.														
Abdomen, tumer														
Bowels, abscess														
Bowels, catarrh		1												
Bowels, congestion	10	10	9	5	1		2			1	1			2
Bowels, hemorrhage	1	3		1						1	1	2		1
Bowels, obstruction	5	1	3	2		1			2		1	1	3	3
Bowels, rupture	1													
Bowels, ulceration							1				1			
Colic	2		1											
Colitis	2	2	1	1			1					1		
Dyspepsia	3	3	2	1		1						1		
Enteritis	39	30	26	27	8	1	5		4	3	4	3	5	4
Gall stones											2			
Gastritis	10	4	6	4		1		2	1	1	1	5	3	3
Gastro-enteritis	5	4	6	11	5				1		1	4	1	1
Glossitis		1												
Hæmatemesis							1				2	1		
Hepatitis	2	1	1	1				2	1		3	5	2	1
Hernia		1										1	4	1
Intussusception	4	1	3	1		1	2			1	2		2	1
Jaundice	2	5		2							1		1	1
Liver, abscess	1							1		2	1		2	
Liver, atrophy														
Liver, cirrhosis											1		2	
Liver, congestion									2	1	5	2		4
Liver, disease	1	1	3	1							2	1	6	3
Liver, fatty														
Liver, hypertrophy										1				1
Liver, schlerosis														
Mesenteric glands, disease of												1		
Peritonitis	2		2	2	4		4	3	2	4	8	31	8	19
Rectum, disease of		1												
Spleen, disease of		1								1				
Stomach, catarrh of		2	2											2
Stomach, congestion of	6	4	1		1				1		2	1		3
Stomach, disease of		1												
Stomach, hemorrhage of														
Stomach, ulceration of		1		1				1				4	3	1
Stomatitis		1	1	1									1	
Tonsilitis	4		4	4	2	2								
Typhlitis								1						
Total	100	79	71	65	21	7	16	10	14	16	39	64	43	51

III—Continued.

Ages.																		
40 to 50		50 to 60		60 to 70		70 to 80		80 to 90		90 to 100		Over 100		Not Rept'ed		Males.	Females.	Total.
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.			
. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	2	2	4
. .	. .	1	1	3	1	3	4	2	. .	. .	. .	. .	. .	1	. .	16	7	23
1	2	4	4	17	5	16	12	6	5	1	. .	1	. .	3	1	152	114	266
1	1	1	. .	1	. .	1	1	. .	1	1	. .	. .	. .	. .	. .	9	7	16
1	. .	. .	. .	1	. .	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	4	2	6
. .	1	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	1	1	2
1	1	2	2	1	. .	2	1	1	. .	. .	. .	. .	. .	. .	. .	16	16	32
. .	1	. .	. .	2	. .	. .	1	. .	1	. .	. .	. .	. .	. .	. .	5	5	10
. .	. .	. .	. .	. .	. .	. .	. .	1	. .	. .	. .	. .	. .	. .	. .	1	1	2
1	3	1	. .	1	. .	2	. .	. .	. .	. .	. .	. .	. .	. .	. .	22	21	43
. .	. .	. .	. .	1	1	1	. .	. .	. .	. .	. .	. .	. .	1	1	11	10	21
6	3	7	7	5	7	7	6	3	3	1	. .	. .	. .	. .	. .	86	62	148
1	. .	. .	. .	1	2	. .	1	. .	. .	. .	. .	. .	. .	. .	. .	7	5	12
. .	. .	1	. .	1	. .	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	3	. . . .	3
. .	. .	. .	. .	. .	. .	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	1	. . . .	1
. .	. .	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	5	. . . .	5
1	. .	3	2	. .	. .	1	. .	1	. .	. .	. .	. .	. .	. .	. .	9	7	16
55	41	66	30	60	49	63	55	26	15	6	8	. .	1	10	7	670	547	1217
1	1	1	. .	. .	2	. .	1	. .	1	. .	. .	. .	. .	. .	. .	5	12	17
5	3	2	. .	4	. .	1	2	. .	. .	. .	. .	. .	. .	1	. .	24	15	39
2	2	4	1	8	5	2	3	1	. .	. .	. .	. .	. .	. .	1	32	26	58
. .	. .	. .	1	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	4	3	7
76	59	95	48	107	72	102	87	41	26	9	8	1	1	16	10	1085	863	1948
. .	. .	. .	. .	. .	1	. .	1	. .	. .	. .	. .	. .	. .	. .	. .	. . . .	2	2
. .	. .	. .	. .	. .	. .	. .	1	. .	. .	. .	. .	. .	. .	. .	. .	. . . .	1	1
. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. . . .	1	1
1	1	1	. .	1	2	3	4	2	. .	. .	. .	. .	. .	. .	. .	31	25	56
1	. .	2	1	. .	4	. .	. .	1	. .	. .	. .	. .	. .	. .	1	6	14	20
3	. .	3	3	5	2	1	2	. .	1	. .	. .	. .	. .	. .	. .	26	16	42
. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	1	. . . .	1
. .	. .	. .	1	. .	1	. .	. .	. .	. .	. .	. .	. .	. .	1	. .	3	2	5
. .	3	. .	. .	. .	. .	2	. .	. .	. .	. .	. .	. .	. .	1	. .	6	3	9
. .	. .	. .	. .	. .	. .	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	5	4	9
. .	. .	. .	1	2	3	3	1	2	. .	. .	. .	. .	. .	. .	. .	12	11	23
2	1	6	7	5	9	4	5	4	. .	. .	. .	. .	. .	1	4	113	94	207
. .	. .	2	1	. .	. .	1	1	. .	. .	. .	. .	. .	. .	. .	. .	5	2	7
3	4	3	6	6	5	4	5	3	2	. .	1	. .	. .	1	1	41	44	85
2	1	1	. .	1	1	. .	. .	. .	1	. .	. .	. .	. .	. .	. .	23	23	46
. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. . . .	1	1
. .	. .	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	4	1	5
3	3	2	3	6	2	1	5	2	1	. .	. .	. .	. .	. .	. .	22	24	46
1	2	. .	3	3	2	3	3	1	. .	. .	. .	. .	. .	. .	. .	12	13	25
. .	2	. .	. .	3	. .	. .	1	. .	. .	. .	. .	. .	. .	. .	. .	16	8	24
1	1	1	3	1	1	6	. .	. .	2	. .	. .	. .	. .	. .	. .	13	15	28
1	. .	2	5	4	1	. .	1	. .	. .	. .	. .	. .	. .	. .	1	11	11	22
. .	. .	1	2	. .	2	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	1	4	5
3	. .	4	1	7	1	4	3	. .	. .	. .	. .	. .	. .	. .	. .	21	5	26
2	2	3	. .	2	1	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	15	10	25
3	1	1	3	2	5	. .	2	. .	. .	. .	. .	. .	. .	2	. .	20	17	37
. .	. .	. .	. .	2	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	2	. . . .	2
1	. .	1	1	2	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	2	4	6	10
. .	. .	. .	. .	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	1	. . . .	1
. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. . . .	1	1
6	9	5	2	. .	1	2	2	. .	2	. .	. .	. .	. .	1	2	44	77	121
. .	. .	. .	. .	. .	. .	. .	1	. .	. .	. .	. .	. .	. .	. .	. .	. . . .	2	2
. .	. .	. .	. .	1	. .	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	2	2	4
. .	. .	3	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	5	4	9
3	1	3	1	3	4	1	2	. .	1	. .	. .	. .	. .	1	1	22	18	40
1	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	1	2	3
. .	. .	1	. .	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	2	. . . .	2
2	1	6	1	4	. .	2	2	. .	. .	. .	. .	. .	. .	. .	. .	17	12	29
1	. .	. .	. .	. .	. .	. .	1	. .	. .	. .	. .	. .	. .	. .	. .	3	3	6
. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	1	10	7	17
. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. . . .	1	1
40	33	52	45	62	49	39	43	15	10	. .	1	. .	. .	8	13	520	486	1006

TABLE No.

CLASS THREE—LOCAL DISEASES.	GROUPED													
	Under 1 Year.		1 to 5		5 to 10		10 to 15		15 to 20		20 to 30		30 to 40	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
ORDER FIVE—URINARY.														
Albuminuria	. .	. .	.	. .	.	. .	.	. .	1	. .	2	. .	1	2
Calculus	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	2	. .	. .	. .
Cystitis	. .	. .	.	. .	1	. .	1	. .	1	. .	3	2	3	. .
Diabetes	. .	. .	. .	1	. .	1	1	. .	. .	2	5	4	6	3
Hæmaturia	1	. .	. .	. .	. .	1	. .	. .	. .	. .	. .	. .	. .	. .
Kidneys, disease of	1	1	2	1	. .	. .	. .	. .	. .	. .	1	2	1	1
Nephria	1	. .	. .	1	1	1	.	1	1	2	4	5	5	4
Nephritis	. .	3	2	5	2	1	1	3	2	. .	13	4	5	3
Prostatitis	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
Uræmia	2	1	4	2	1	1	. .	1	. .	2	1	3	.	4
Urethra, stricture of	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	1	. .
Urine, retention of	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
Urine, suppression of	. .	. .	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
Total	6	5	9	10	5	5	3	5	5	6	31	20	22	17
ORDER SIX—GENERATIVE.														
Metritis	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	10	. .	5
Ovarian tumor	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	2	. .	1
Ovaritis	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	1
Uterus, disease of	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	2
Uterus, rupture of	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	2
Uterus, tumor of	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
Total	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	12	. .	11
ORDER SEVEN—OSSEOUS AND LOCOMOTARY.														
Ostitis	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	1	. .
Total	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	1	. .
ORDER EIGHT—INTEGUMENTARY.														
Abscess	1	1	. .	1	. .	. .	. .	. .	1	1	2	1	1	3
Cellulitis	. .	1	. .	. .	. .	. .	. .	. .	. .	. .	.	. .	. .	1
Lupus	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	1	. .
Total	1	2	. .	1	. .	. .	. .	. .	1	1	2	1	2	4
ORDER NINE—MISCELLANEOUS.														
Otitis	1	. .	. .	. .	. .	. .	1	. .	. .	1	. .	. .	. .	. .
Rhinitis	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
Tumor	1	. .	2	1	. .	. .	1	. .	. .	. .	1	1	. .	. .
Total	3	. .	2	1	. .	. .	2	. .	. .	1	1	1	. .	. .
Total Local Diseases	694	545	385	356	103	96	90	72	97	98	268	257	194	223

III—Continued.

Ages.																Males.	Females.	Total.
40 to 50		50 to 60		60 to 70		70 to 80		80 to 90		90 to 100		Over 100		Not Rep'td.				
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.			
. .	1	3	. .	1	2	3	2	. .	. .	. .	. .	. .	. .	. .	. .	11	7	18
. .	. .	. .	. .	. .	. .	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	3	. . . .	3
2	. .	4	1	10	1	14	1	8	. .	1	. .	. .	. .	. .	. .	48	5	53
4	3	5	2	6	. .	4	3	. .	. .	. .	. .	. .	. .	. .	. .	31	19	50
. .	. .	. .	. .	. .	. .	. .	. .	1	. .	. .	. .	. .	. .	. .	. .	2	1	3
2	2	1	1	3	2	3	. .	. .	1	. .	. .	. .	. .	. .	. .	14	11	25
10	7	15	10	19	9	17	2	4	. .	. .	. .	. .	. .	1	. .	78	42	120
5	2	3	4	4	. .	5	2	3	. .	. .	1	. .	. .	. .	2	45	30	75
. .	. .	1	. .	. .	. .	2	. .	. .	. .	. .	. .	. .	. .	1	. .	4	. . . .	4
1	2	3	1	7	2	7	1	2	. .	. .	. .	. .	. .	1	1	29	21	50
. .	. .	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	2	. . . .	2
1	. .	. .	. .	. .	. .	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	3	. . . .	3
. .	. .	. .	. .	. .	. .	. .	. .	. .	1	. .	. .	. .	. .	. .	. .	1	1	2
25	17	36	19	50	16	57	11	18	2	1	1	. .	. .	3	3	271	137	408
. .	2	. .	2	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	1	. . . .	20	20
. .	2	. .	3	. .	1	. .	2	. .	. .	. .	. .	. .	. .	. .	. .	. . . .	11	11
. .	2	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. . . .	3	3
. .	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. . . .	3	3
. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. . . .	2	2
. .	2	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. . . .	2	2
. .	9	. .	5	. .	1	. .	2	. .	. .	. .	. .	. .	. .	. .	1	. . . .	41	41
. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	1	. . . .	1
. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	1	. . . .	1
. .	. .	4	. .	. .	. .	. .	. .	. .	. .	1	. .	. .	. .	. .	. .	10	7	17
. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. . . .	2	2
. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	1	. . . .	1
. .	. .	4	. .	. .	. .	. .	. .	. .	. .	1	. .	. .	. .	. .	. .	11	9	20
. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	2	1	3
. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	1	. . . .	1
1	. .	1	3	2	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	9	6	15
1	. .	1	3	2	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	12	7	19
213	191	319	199	404	253	343	270	136	91	12	16	1	1	52	40	3256	2708	5964

TABLE No.

CLASS FOUR—DEVELOP

Causes of Death, Number of Males and Females,

CLASS FOUR—DEVELOPMENTAL DISEASES.	GROUPED													
	Under 1 Year.		1 to 5		5 to 10		10 to 15		15 to 20		20 to 30		30 to 40	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
ORDER ONE—CHILDREN.														
Atelectasis	4	2	. .	. .	1	. .	. .	. .	. .	. .	. .	. .	. .	. .
Birth, premature	153	108	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
Childbirth, accidental	8	3	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
Craniotomy	2	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
Cyanosis	39	21	1	. .	. .	. .	2	. .	. .	. .	. .	. .	. .	. .
Debility	18	17	2	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
Dentition	5	1	4	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
Malformation	10	11	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
Malnutrition	13	3	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
Nursing sore mouth	. .	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
Prolapsis funis	. .	2	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
Umbilical hemorrhage	6	3	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
Total	258	173	7	1	1	. .	2	. .	. .	. .	. .	. .	. .	. .
ORDER TWO—WOMEN.														
Amenorrhœa	. .	. .	. .	. .	. .	. .	. .	. .	. .	1	. .	. .	. .	. .
Cæsarean section	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
Climacteria	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
Ovariotomy	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	1
Parturition	. .	. .	. .	. .	. .	. .	. .	. .	. .	3	. .	9	. .	6
Phlegmatia dolens	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	1
Placenta previa	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	1	. .	2
Postpartum hemorrhage	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	2	. .	2
Puerperal eclampsia	. .	. .	. .	. .	. .	. .	. .	. .	. .	9	. .	21	. .	12
Uterine, hemorrhage	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	3	. .	2
Total	. .	. .	.	.	. .	. .	. .	. .	. .	13	. .	36	. .	26
ORDER THREE—OLD AGE.														
Old age	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	3	1
Total	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	3	2
ORDER FOUR—NUTRITION.														
Asthenia	2	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	1
Debility	. .	. .	. .	. .	. .	. .	. .	. .	1	. .	. .	. .	. .	2
Exhaustion	2	3	1	1	. .	. .	. .	1	1	. .	1	4	. .	6
Marasmus	22	11	5	2	. .	1	1	. .	1	. .	. .	1	. .	. .
Total	26	15	6	3	. .	1	1	1	3	. .	1	5	. .	9
Total Developmental Diseases	284	188	13	4	1	1	3	1	3	13	1	41	3	37

III—Continued.

MENTAL DISEASES.

Grouped Ages, for the Year Ending September 30, 1885.

AGES.																Males.	Females.	Total.
40 to 50		50 to 60		60 to 70		70 to 80		80 to 90		90 to 100		Over 100		Not Rept'ed				
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.			
. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	5	2	7
. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	153	108	261
. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	8	3	11
. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	2	1	3
. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	42	21	63
. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	20	17	37
. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	9	2	11
. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	10	11	21
. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	13	3	16
. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. . . .	1	1
. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. . . .	2	2
. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	6	3	9
. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	268	174	442
. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. . . .	1	1
. .	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. . . .	1	1
. .	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. . . .	1	1
. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. . . .	1	1
. .	2	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	1	. . . .	21	21
. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. . . .	1	1
. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	1	. . . .	4	4
. .	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	1	. . . .	6	6
. .	2	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	1	. . . .	45	45
. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	3	. . . .	8	8
. .	7	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	7	. . . .	89	89
2	3	7	8	18	25	45	71	84	78	6	25	1	. .	6	2	172	214	386
2	3	7	8	18	25	45	71	84	78	6	25	1	. .	6	2	172	214	386
. .	. .	. .	1	. .	. .	1	1	2	3	. .	. .	. .	. .	. .	. .	5	7	12
4	. .	6	10	16	12	32	26	16	20	1	3	. .	. .	. .	2	76	75	151
4	4	3	2	6	1	3	. .	. .	. .	. .	. .	. .	. .	1	. .	22	22	44
. .	. .	. .	1	2	. .	1	1	3	2	1	. .	. .	. .	. .	. .	36	19	55
8	4	9	14	24	13	37	28	21	25	2	3	. .	. .	1	2	139	123	262
10	14	16	22	42	38	82	99	105	103	8	28	1	. .	7	11	579	600	1179

TABLE No.

CLASS FIVE—ACCIDENTS, NEGLI

Causes of Death, Number of Males and Females,

CLASS FIVE—ACCIDENTS, NEGLIGENCE & VIOLENCE.	GROUPED													
	Under 1 Year.		1 to 5.		5 to 10.		10 to 15.		15 to 20.		20 to 30.		30 to 40.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
ORDER ONE—ACCIDENTS.														
Abortion										1		1		1
Accident	7	6	3	4	9		7	2	8	2	33	4	18	2
Asphyxia	15	17	1									1		
Boiler explosion									1		3		4	
Brain, concussion				1	1		1		1		2			
Burn	2	3	8	7		8		3	1	3		2		2
Buzz saw									1					
Choking	1													
Coal mine													1	
Drowning			4	2	8	1	9		9	2	10	1	2	2
Exposure to cold											2		1	
Fall		1	1	1					2			1	2	
Falling log											1			
Falling tree											1		2	
Fracture of femur														
Fracture of hip														
Fracture of neck											1		2	
Fracture of skull			1						1					
Fracture of thigh														
Injury to head						1								
Insolation														
Kicked by a horse									1					
Kicked by a mule											1			
Laudanum														
Lightning							1			1	2	1	1	
Morphine	1			1								2		
Opium	1	1	1									1		
Poison			1							1	4		1	3
Railroad		1	2	2	1		2	1	7		25		14	
Runaway team											1			
Scald	1	1	4	4							1		1	
Shock													1	
Shooting		1	1		4		2		9		15	1	6	
Strangulation	1					1								
Strychnine														
Suffocation	4	2		1					1		1			
Total	33	33	27	23	23	11	22	6	42	10	103	15	56	10
ORDER TWO—JUDICIAL EXECUTION.														
Hanging											1			
Total											1			
ORDER THREE—HOMICIDE.														
Homicide							1		1		5	3	5	
Total							1		1		5	3	5	

III—Continued.

GENCE AND VIOLENCE.

Grouped Ages, for the Year Ending September 30, 1885.

Ages.																Males.	Females.	Total.
40 to 50.		50 to 60.		60 to 70.		70 to 80.		80 to 90.		90 to 100.		Over 100		Not Rep'td.				
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.			
. .	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. . . .	4	4
15	4	12	3	5	3	6	3	2	2	1	. .	. .	. .	7	1	133	36	169
. .	. .	. .	1	. .	. .	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	17	19	36
2	. .	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	11	. . . .	11
1	. .	4	. .	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	11	1	12
3	2	. .	2	1	. .	1	1	. .	1	. .	1	. .	. .	. .	. .	16	35	51
. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	1	. . . .	1
. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	1	. . . .	1
. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	1	. . . .	1
2	. .	4	1	2	. .	. .	2	. .	. .	. .	. .	. .	. .	2	. .	52	10	62
1	. .	. .	. .	1	. .	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	6	. . . .	6
3	. .	3	1	2	. .	. .	2	. .	3	. .	. .	. .	. .	. .	. .	13	9	22
. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	1	. . . .	1
. .	. .	. .	. .	. .	. .	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	4	. . . .	4
. .	1	. .	. .	2	. .	1	2	. .	3	. .	1	. .	. .	. .	1	3	8	11
. .	. .	. .	. .	. .	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. . . .	1	1
. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	3	. . . .	3
2	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	4	. . . .	4
. .	. .	. .	. .	. .	. .	. .	. .	. .	1	. .	. .	. .	. .	. .	. .	. . . .	1	1
1	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	1	1	2
. .	. .	1	. .	. .	. .	2	. .	. .	. .	. .	. .	. .	. .	. .	. .	3	. . . .	3
. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	1	. . . .	1
. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	1	. . . .	1
. .	. .	. .	. .	. .	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. . . .	1	1
. .	. .	1	. .	. .	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	5	3	8
. .	. .	1	. .	2	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	4	4	8
. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	2	2	4
2	. .	3	. .	. .	. .	2	. .	. .	. .	. .	. .	. .	. .	. .	1	13	5	18
10	1	8	3	9	. .	1	. .	. .	. .	. .	. .	. .	. .	16	. .	95	8	103
. .	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	1	1	18
. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	7	5	12
. .	2	. .	. .	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	2	2	4
6	1	5	. .	1	. .	. .	. .	1	. .	. .	. .	. .	. .	5	. .	55	3	58
. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	1	1	2
. .	. .	. .	. .	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	1	. . . .	1
1	. .	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	8	3	11
49	13	44	11	28	7	16	9	3	10	1	2	. .	. .	30	3	477	163	640
. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	1	. . . .	1
. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	1	. . . .	1
3	. .	2	1	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	1	2	19	6	25
3	. .	2	1	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	1	2	19	6	25

TABLE No.

CLASS FIVE—ACCIDENTS, NEGLIGENCE & VIOLENCE.	GROUPED													
	Under 1 year.		1 to 5.		5 to 10.		10 to 15.		15 to 20.		20 to 30.		30 to 40.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
ORDER FOUR—SUICIDE.														
Arsenic	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Drowning	..	..	..	..	..	..	..	..	..	..	1	..	..	1
Hanging	..	..	..	..	..	..	..	..	..	..	1	..	2	1
Laudanum	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Morphine	..	..	..	..	..	..	..	..	..	..	1	1	..	1
Poison	..	..	..	..	..	..	..	..	..	..	1	..	1	..
Shooting	..	..	..	..	..	..	..	..	1	..	2	..	2	..
Strychnine	..	..	..	..	..	..	..	..	..	1	..	..	..	..
Suicide	..	..	..	..	..	..	..	..	2	4	10	6	11	1
Total	..	..	..	..	..	..	..	.	3	5	16	7	16	4
Total Accidents, Violence and Negligence	33	33	27	23	23	11	23	6	46	15	125	25	77	14
UNKNOWN.	73	65	7	9	3	1	7	2	2	7	9	10	8	8
Total	73	65	7	9	3	1	7	2	2	7	9	10	8	8
RECAPITULATION.														
Zymotic Diseases	627	542	533	492	195	169	86	105	95	157	183	247	100	150
Constitutional Diseases	62	67	75	64	27	27	19	48	72	177	293	418	212	242
Local Diseases	639	545	385	356	103	96	90	72	97	98	268	257	194	223
Developmental Diseases	284	188	13	4	1	1	3	1	3	13	1	41	3	37
Accidents, Negligence and Violence	33	33	27	23	23	11	23	6	46	15	125	25	77	14
Unknown	73	65	7	9	3	1	7	2	2	7	9	10	8	8
Total deaths from all causes	1718	1440	1040	948	352	305	228	234	315	467	879	998	594	674

III—Continued.

Ages.																Males.	Females.	Total.
40 to 50.		50 to 60.		60 to 70.		70 to 80.		80 to 90.		90 to 100.		Over 100		Not Reported.				
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.			
. .	. .	. .	. .	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	1	. . . .	1
. .	. .	. .	. .	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	2	. .	4	1	5
2	2	7	. .	2	. .	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	15	3	18
. .	. .	. .	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. . . .	1	1
. .	. .	1	. .	2	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	4	2	6
. .	. .	2	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	4	. . . .	4
1	. .	1	. .	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	1	. .	9	. . . .	9
. .	1	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. . . .	2	2
13	. .	6	4	1	. .	2	2	. .	. .	. .	. .	. .	. .	2	. .	47	17	64
16	3	17	5	8	. .	3	2	. .	. .	. .	. .	. .	. .	5	. .	84	26	110
68	16	63	17	37	7	19	11	3	10	1	2	. .	. .	36	5	581	195	776
14	6	14	7	10	14	4	3	5	2	1	2	. .	. .	26	17	183	153	336
14	6	14	7	10	14	4	3	5	2	1	2	. .	. .	26	17	183	153	336
102	83	97	62	69	62	52	54	20	16	2	. .	. .	. .	45	30	2206	2169	4375
156	295	135	137	121	115	67	76	16	28	2	5	. .	. .	53	64	1310	1663	2973
213	191	319	199	404	253	343	270	136	91	12	16	1	1	52	40	3256	2708	5964
10	14	16	22	42	38	82	99	105	103	8	28	1	. .	7	11	579	600	1179
68	16	63	17	37	7	19	11	3	10	1	2	. .	. .	36	5	581	195	776
14	6	14	7	10	14	4	3	5	2	1	2	. .	. .	26	17	183	153	336
563	505	644	444	683	489	567	513	285	250	26	53	2	1	219	167	8115	7488	15,603

TABLE No. IV.

Deaths by Counties—1886.

COUNTIES.	1884.						1885.																								Males.	Females.	Total.
	Oct.		Nov.		Dec.		Jan.		Feb.		Mar.		April.		May.		June.		July.		Aug.		Sept.				
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M	F.	M.	F.	M.	F.	M.	F.			
Adams	5	6	5	3	2	2	. .	. .	. .	1	3	5	1	1	2	1	1	. .	3	. .	2	3	3	5	27	27	54
Allen	28	23	24	33	15	25	43	22	6	9	22	25	. .	. .	. .	. .	. .	. .	33	25	43	30	30	28	244	220	461
Bartholomew	9	9	9	9	16	8	12	13	15	8	8	7	13	7	9	6	8	8	9	14	11	17	17	12	136	118	254
Benton	6	4	2	2	3	5	1	3	4	4	1	. .	6	1	4	. .	5	2	4	2	5	2	3	2	44	27	71
Blackford	9	1	1	1	3	. .	2	5	2	1	2	1	. .	1	1	. .	2	. .	1	1	1	2	1	. .	25	13	38
Boone	11	9	6	5	7	2	11	9	3	8	8	6	6	7	8	3	14	12	4	6	9	8	6	5	93	80	173
Brown	1	1	1	. .	5	2	1	3	2	. .	3	2	6	4	2	1	2	1	3	. .	2	1	4	1	32	16	48
Carroll	8	10	14	5	12	6	8	8	12	10	9	7	9	9	7	7	6	2	10	6	15	7	6	6	116	93	209
Cass	7	7	4	8	4	9	5	2	5	4	20	12	6	1	8	7	5	8	6	5	14	9	7	7	91	79	170
Clark	15	19	4	4	5	2	9	16	10	11	5	3	17	5	13	16	16	12	5	8	4	7	9	8	112	111	223
Clay	5	4	2	3	4	. .	13	4	18	8	8	9	11	3	7	8	8	9	8	11	6	8	13	5	103	72	175
Clinton	6	6	4	3	2	2	1	5	2	4	. .	2	2	1	1	3	1	2	5	3	4	5	4	1	32	37	69
Crawford	5	6	3	4	3	3	2	1	3	2	2	. .	3	3	1	3	4	4	3	4	2	4	5	4	36	38	74
Daviess	2	6	5	5	5	6	4	8	5	4	7	10	5	5	2	2	5	1	8	5	5	8	1	5	54	65	119
Dearborn	5	5	6	4	8	6	6	10	11	8	10	5	1	5	6	7	10	6	12	7	12	3	6	7	93	73	166
Decatur	14	17	8	5	3	6	5	5	5	3	3	6	2	2	3	3	2	4	2	9	3	4	5	1	55	65	120
Dekalb	5	4	1	2	2	3	2	1	2	3	1	1	3	5	2	3	2	1	5	3	10	6	13	11	48	43	91
Delaware	7	7	6	4	5	9	5	8	12	17	17	13	10	19	8	11	8	4	10	7	10	18	3	9	101	126	227
Dubois	10	5	6	7	3	6	4	4	6	. .	9	6	2	3	5	2	3	4	4	8	5	5	5	2	62	52	114
Elkhart	3	8	4	9	5	4	6	3	2	3	7	7	3	1	6	2	6	1	9	1	9	2	3	7	63	48	111
Fayette	10	3	6	3	4	1	2	5	4	7	2	6	5	6	4	4	3	2	6	4	2	8	6	6	54	55	109
Floyd	7	17	10	19	17	5	10	17	17	14	12	11	13	8	7	14	15	12	5	9	15	14	9	11	137	151	288
Fountain	7	6	6	6	3	1	3	. .	3	3	7	7	7	5	6	2	6	2	12	4	5	11	6	7	71	54	125
Franklin	3	1	2	. .	2	. .	5	. .	5	1	3	2	1	. .	2	1	1	1	3	2	2	6	3	3	32	17	49
Fulton	2	2	3	3	3	2	2	4	2	1	7	3	5	4	1	1	2	3	3	5	6	. .	6	4	42	32	74

Gibson	11	14	11	14	12	6	16	13	13	12	10	11	10	13	7	4	7	7	7	5	6	8	7	9	117	116	233
Grant	4	2	8	5	7	6	6	8	12	7	11	10	4	2	8	5	5	3	3	5	10	6	5	6	83	65	148
Greene	6	5	6	10	6	1	7	5	7	13	. .	7	5	2	2	9	5	3	6	5	7	8	4	5	61	73	134
Hamilton	11	12	9	7	7	7	10	9	14	14	15	12	9	17	7	11	5	10	11	15	20	16	11	15	129	145	274
Hancock	7	3	2	2	1	1	13	4	14	8	11	11	9	15	4	5	2	3	10	9	9	4	6	7	88	72	160
Harrison	8	3	2	3	4	8	7	7	3	12	4	10	2	3	3	8	. .	7	12	11	13	15	6	8	64	95	159
Hendricks	10	6	5	10	4	3	12	19	8	8	12	7	9	10	11	13	3	5	18	15	10	4	6	6	108	106	214
Henry	8	4	7	10	2	4	11	3	6	6	2	2	11	16	13	7	8	8	13	7	15	14	7	10	103	91	194
Howard	4	6	7	7	7	7	1	3	4	2	3	6	6	4	10	3	5	3	3	6	12	11	10	9	72	67	139
Huntington	12	10	5	11	10	10	11	11	16	8	13	12	13	8	10	8	10	5	7	15	13	7	7	4	127	109	236
Jackson	12	9	6	3	2	1	7	6	3	8	4	7	2	11	9	9	2	1	7	2	8	14	11	14	73	85	158
Jasper	5	1	. .	. .	3	5	3	5	4	2	7	4	4	1	1	4	3	4	3	1	5	2	3	8	41	37	78
Jay	4	4	9	8	4	10	12	8	9	2	6	4	7	7	5	5	4	3	9	8	3	6	7	6	79	71	150
Jefferson	2	. .	2	3	2	1	9	9	7	7	9	4	4	9	4	6	2	1	7	4	7	7	. .	. .	55	51	106
Jennings	7	2	6	4	1	2	7	4	9	9	6	3	5	2	4	3	3	4	3	4	6	4	7	4	64	45	109
Johnson	8	14	8	7	8	5	6	5	9	12	8	5	3	7	8	9	4	6	9	16	6	6	11	1	88	93	181
Knox	3	5	6	1	1	2	7	5	16	5	4	8	9	5	8	4	5	5	6	11	12	11	15	10	92	72	164
Kosciusko	5	7	3	4	3	3	5	7	5	3	5	4	3	7	3	2	3	3	17	5	7	7	3	3	62	55	117
Lagrange	10	5	3	4	. .	1	3	5	6	7	5	3	7	2	1	4	4	5	6	1	1	1	1	1	47	39	86
Lake	3	4	5	4	2	2	3	7	3	3	3	5	11	9	7	4	9	7	8	1	7	2	2	6	63	54	117
Laporte	15	7	19	9	9	14	15	11	14	15	19	14	15	13	15	11	11	7	14	9	19	9	9	13	174	132	306
Lawrence	7	4	4	6	3	2	2	. .	3	1	. .	. .	6	7	8	5	2	5	5	3	6	7	5	4	51	44	95
Madison	12	13	16	10	16	11	15	12	18	19	13	13	19	16	10	7	15	11	7	11	25	20	12	24	178	167	345
Marion	80	84	65	69	57	53	72	84	82	69	61	62	79	82	84	77	68	67	86	80	76	75	85	72	895	874	1769
Marshall	5	1	1	2	1	. .	3	2	4	1	4	3	. .	5	3	2	1	2	2	. .	5	. .	6	1	35	19	54
Martin	6	6	7	4	3	5	2	. .	2	3	4	1	1	2	2	1	2	3	3	3	2	3	3	3	37	34	71
Miami	10	6	5	5	13	11	19	6	12	8	14	12	5	6	5	2	. .	2	5	7	8	5	4	7	95	77	172
Monroe	3	5	4	10	1	2	7	8	9	7	8	4	4	5	13	4	2	2	5	11	10	9	11	2	77	69	146
Montgomery	5	13	9	9	6	6	9	5	10	5	7	5	10	7	1	2	. .	5	11	14	3	6	1	2	72	79	151
Morgan	6	6	2	2	3	3	. .	4	. .	2	1	5	3	2	2	3	2	3	3	7	11	6	5	3	38	46	84
Newton	1	3	4	1	3	1	1	. .	2	1	1	3	1	3	2	2	2	1	2	2	1	1	. .	1	20	19	39
Noble	2	6	1	1	3	5	4	3	2	6	. .	3	2	. .	. .	1	1	. .	1	1	. .	1	5	7	21	34	55
Ohio	3	2	2	3	. .	4	3	4	2	4	1	5	4	2	1	1	2	1	3	2	1	1	2	1	24	30	54
Orange	5	3	2	6	4	1	5	4	3	3	3	3	2	5	1	4	2	. .	7	2	9	3	2	11	45	45	90
Owen	2	5	2	5	. .	4	11	5	4	3	2	4	4	5	6	1	1	1	2	5	6	1	3	2	43	41	84
Parke	10	6	3	. .	5	3	7	5	4	4	7	3	3	1	. .	1	7	2	10	7	11	9	6	5	73	46	119
Perry	. .	2	2	2	. .	. .	. .	5	7	3	3	2	2	. .	4	2	4	. .	2	6	4	6	5	4	33	32	65
Pike	4	. .	5	4	1	2	4	2	2	4	6	2	5	6	1	1	2	3	2	3	1	3	8	8	41	38	79
Porter	3	3	2	. .	5	4	4	3	13	5	9	9	10	10	4	5	2	3	4	4	14	9	1	1	71	56	127
Posey	18	13	19	13	24	9	16	9	8	13	10	11	12	8	9	5	4	3	13	11	8	14	9	8	150	117	267
Pulaski	1	. .	4	3	4	2	2	6	5	2	3	. .	1	1	3	1	. .	. .	3	5	9	3	4	3	39	26	65
Putnam	5	7	2	4	9	. .	12	6	11	10	5	8	5	6	5	3	4	6	8	8	11	7	1	4	78	69	147
Randolph	6	9	18	11	8	3	15	11	10	9	11	8	9	10	11	8	6	3	9	10	6	9	13	6	122	97	219

TABLE No. IV—Continued.

COUNTIES.	1884.						1885.																		Males.	Females.	Total.
	Oct.		Nov.		Dec.		Jan.		Feb.		Mar.		April.		May.		June.		July.		Aug.		Sept.				
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.			
Ripley	10	7	3	2	2	4	3	2	. .	1	8	8	6	2	3	5	4	. .	6	5	6	2	8	4	59	43	102
Rush	13	12	7	7	3	1	18	12	7	10	2	5	10	4	5	6	. .	1	7	7	5	7	10	4	87	72	159
Scott	1	1	. .	1	3	4	4	4	2	2	2	6	1	1	1	2	3	4	1	3	2	3	5	4	25	35	60
Shelby	4	3	6	4	2	6	4	2	4	4	2	4	1	5	3	3	2	2	12	9	3	8	3	7	46	57	103
Spencer	3	12	8	6	10	8	11	7	10	12	14	12	12	24	5	9	3	4	10	5	6	8	12	8	104	105	209
Starke	2	3	. .	1	. .	1	. .	. .	1	2	. .	1	. .	. .	. .	1	1	1	4	2	. .	1	. .	1	8	14	22
Steuben	. .	. .	. .	1	2	1	. .	. .	1	1	2	1	1	. .	1	. .	3	1	1	. .	3	. .	1	6	15	14	29
St. Joseph	10	10	15	9	8	9	10	11	8	8	6	3	5	9	4	5	2	2	11	8	13	12	11	7	103	93	196
Sullivan	9	8	8	9	4	7	8	10	11	15	3	8	12	10	5	5	4	7	2	4	10	9	9	11	85	103	188
Switzerland	2	2	2	. .	. .	2	1	2	3	2	7	2	5	9	6	2	5	3	1	5	2	5	. .	1	34	35	69
Tippecanoe	4	3	3	2	3	3	8	4	13	11	5	4	6	6	8	4	2	2	10	11	11	15	11	15	84	80	164
Tipton	4	4	2	4	1	2	. .	. .	1	1	8	5	. .	4	2	1	2	. .	1	5	7	6	1	4	29	36	65
Union	3	2	1	2	. .	6	2	1	2	2	1	2	4	3	1	1	2	. .	. .	2	. .	1	6	2	22	24	46
Vanderburgh	63	44	48	41	43	34	52	31	45	35	34	36	38	33	36	38	42	29	47	39	34	37	31	28	513	425	938
Vermillion	3	. .	2	2	1	1	8	4	4	1	4	. .	5	3	4	1	3	1	10	8	5	7	2	1	51	29	80
Vigo	24	21	8	13	7	. .	16	22	30	26	22	28	20	24	15	10	5	6	30	29	35	27	18	12	230	218	448
Wabash	3	6	5	2	2	2	4	4	3	3	3	1	3	4	3	2	1	. .	3	2	2	. .	1	. .	33	26	59
Warren	5	3	. .	1	3	1	3	2	2	5	4	4	3	3	1	4	1	. .	3	1	3	3	3	3	31	30	61
Warrick	6	4	3	3	4	3	8	12	13	11	13	9	8	7	2	3	4	3	13	5	19	13	10	8	104	91	194
Washington	5	4	4	5	4	3	9	9	3	1	4	5	4	4	5	3	6	9	6	5	5	1	6	1	61	50	111
Wayne	19	27	18	17	23	22	18	26	24	23	29	22	15	20	18	23	18	12	22	13	27	32	32	18	263	255	518
Wells	2	3	2	2	2	4	4	2	4	3	2	3	1	3	3	3	3	1	2	2	3	3	3	3	31	32	63
White	5	5	5	4	3	2	2	1	2	3	2	3	3	3	1	2	2	2	5	1	3	1	6	4	39	31	70
Whitley	14	10	4	10	8	9	6	1	4	6	3	6	3	2	4	3	3	2	9	10	17	10	13	12	88	81	169
Total	743	711	613	604	577	479	712	635	728	664	646	643	640	640	566	535	485	430	761	762	852	769	745	663	8115	7488	*15603

* Exclusive of still-births.

TABLE No. V.

SEVEN CAUSES OF DEATH.

Comparative Statement, Showing Number of Deaths and Number of Cases Reported for the Year Ending September 30, 1885.

COUNTIES.	Diphtheria.		Typh'd Fever.		Scarl't Fever.		Cer. Spinal Fever.		Small-pox.		Measles.		Pertussis.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Adams	2	4	3	6				1						1
Allen	23	21	24	38	11	4	3	4				1	2	4
Bartholomew	4	2	12	16	2						1	4		
Benton	1	1	3	4				1						
Blackford			8	11										
Boone	14	4	32	6	34	12						1		
Brown			1	2										
Carroll	42	10	2	5	18	3	1	1				1		
Cass	3	4	2	4	14	3								
Clark		1	3	14	1	1		2	1	1	1	7		
Clay			5	3	9	2	1	1			6	4		
Clinton	7	5	4	1	2			1			3			
Crawford			6	9			2	3			23	4		
Daviess	1	1	6	7				1						
Dearborn	5	1	4	3	16	2	5	2			2	2		
Decatur	9	6	6	6	8	1	2	1			1	3		
DeKalb	61	13	24	3	7	2	1	2						
Delaware	22		3	11	43	3	2	3			2			
Dubois	2		11	15	2		2	4				4	1	
Elkhart	4		8	9	26						1			
Fayette	3	2	14	5	22		2	2						
Floyd	8	4	19	21	57	5						3		2
Fountain	18	1	28	4	1		1							1
Franklin	4	2	1	3	7									1
Fulton	3	1	2	1								1		
Gibson	3	3	19	16	2						164	12		
Grant	12	2	4	1	8	4								2
Greene			4	6				2						
Hamilton	50	10	9	8	34	7	1	10			3			3
Hancock	5	2	3	8	8		3	3						1
Harrison	32	5	9	8			4	6			7			1
Hendricks	12	2	11	5	65	7							5	
Henry	3		7	17	9		1	1			2			
Howard	1		7	17	7	1	1	2						
Huntington		12	11	18										3
Jackson	11	1	5	5			2	1			74	4		2
Jasper	1		1	2	6	2							1	
Jay	29	7	13	16	10	3		1	1					1
Jefferson	14		2	2	8						11	1	5	1
Jennings	2	1	3	5							4	5	1	1
Johnson	5	1	16	9	48	2		1			1			
Knox	1	3	1	9	1			4				1		
Kosciusko	18	6	3	6	5									
Lagrange	5	4		1	62	2								
Lake	24	9	1	7	109	9		1					1	1

TABLE No. V—Continued.

COUNTIES.	DIPHTHERIA.		TYPH'D FEVER.		SCARL'T FEVER.		CER. SPINAL FEVER.		SMALL-POX.		MEASLES.		PERTUSSES.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Laporte	90	15	3	4	104	3	3	5	1	. .	2	. .	. .	. .
Lawrence	1	1	12	11	. .	. .	1	2	. .	. .	. .	3	1	1
Madison	5	13	7	15	. .	. .	. .	. .	. .	. .	. .	. .	. .	16
Marion	103	37	24	64	246	48	. .	18	1	. .	117	8	. .	. .
Marshall	. .	. .	. .	2	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
Martin	. .	. .	1	3	. .	. .	. .	3	. .	. .	2	. .	. .	. .
Miami	6	19	4	10	6	16	1	4	. .	. .	. .	. .	1	1
Monroe	1	1	3	6	. .	. .	1	2	. .	. .	. .	2	. .	. .
Montgomery	12	1	9	11	28	2	1	6	. .	. .	7	. .	. .	2
Morgan	3	2	2	3	. .	1	. .	. .	. .	. .	. .	. .	1	2
Newton	. .	. .	2	2	. .	. .	. .	. .	. .	. .	. .	. .	. .	1
Noble	7	2	2	2	9	2	. .	. .	. .	. .	1	. .	. .	1
Ohio	6	. .	4	3	4	. .	. .	. .	. .	. .	. .	. .	. .	. .
Orange	. .	1	. .	6	. .	. .	. .	1	. .	. .	. .	4	. .	. .
Owen	. .	. .	2	2	8	3	. .	1	. .	. .	. .	. .	. .	. .
Parke	. .	1	3	15	7	2	. .	. .	. .	. .	. .	1	. .	. .
Perry	2	. .	. .	2	. .	. .	. .	. .	. .	. .	. .	1	. .	. .
Pike	. .	1	. .	8	. .	1	. .	6	. .	. .	. .	. .	. .	. .
Porter	7	7	1	4	11	1	. .	. .	. .	. .	. .	10	. .	. .
Posey	3	1	50	12	26	4	2	5	. .	. .	. .	1	. .	. .
Pulaski	1	. .	. .	2	5	. .	. .	2	. .	. .	. .	. .	. .	2
Putnam	21	3	59	6	25	2	. .	. .	. .	. .	2	. .	. .	. .
Randolph	22	. .	3	8	17	. .	3	4	. .	. .	15	1	8	2
Ripley	2	1	4	3	2	1	. .	. .	. .	. .	. .	. .	. .	. .
Rush	14	. .	5	9	48	4	. .	. .	. .	. .	. .	. .	. .	. .
Scott	. .	2	. .	2	. .	. .	. .	. .	. .	. .	. .	3	. .	1
Shelby	9	. .	3	7	23	3	2	3	. .	. .	. .	. .	6	2
Spencer	11	5	. .	9	. .	. .	10	10	. .	. .	. .	. .	. .	. .
Starke	. .	4	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
Steuben	7	2	. .	2	5	. .	. .	. .	. .	. .	76	2	. .	. .
St. Joseph	2	4	4	7	9	7	. .	3	. .	. .	1	1	1	1
Sullivan	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	11	. .	. .
Switzerland	9	. .	. .	3	3	. .	. .	. .	. .	. .	. .	7	. .	1
Tippecanoe	. .	1	. .	5	9	1	. .	. .	. .	. .	. .	. .	. .	1
Tipton	2	1	1	2	1	1	. .	3	. .	. .	. .	. .	. .	. .
Union	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
Vanderburgh	244	93	7	35	14	. .	7	9	. .	. .	12	1	. .	3
Vermillion	. .	1	. .	2	. .	. .	. .	. .	. .	. .	. .	. .	. .	1
Vigo	16	1	85	42	6	. .	. .	. .	40	12	91	2	. .	2
Wabash	. .	1	. .	5	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
Warren	. .	. .	. .	. .	. .	1	. .	. .	. .	. .	. .	. .	. .	. .
Warrick	. .	1	. .	10	. .	. .	. .	. .	. .	. .	. .	16	. .	. .
Washington	4	. .	. .	3	3	1	. .	2	. .	. .	. .	8	1	1
Wayne	11	2	43	20	48	4	1	2	. .	. .	. .	. .	. .	3
Wells	. .	1	. .	1	. .	. .	. .	1	. .	. .	. .	. .	. .	2
White	. .	. .	. .	. .	8	1	. .	. .	. .	. .	. .	. .	. .	. .
Whitley	271	33	3	10	35	5	. .	. .	. .	. .	. .	. .	27	1
Total	1356	411	706	748	1372	195	66	160	44	12	632	141	62	76

TABLE No. VI.

MARRIAGES.

Showing the Total Number of Marriages, Arranged by Months, Color, Nationality and Grouped Ages for the Year Ending September 30, 1885.

COUNTIES.	Whole Number.	1884.			1885.									Color.		Nationality.					
		Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May.	June	July.	Aug.	Sept.	White.	Colored.	American.		Foreign.		Not Reported.	
																Gr.	Br.	Gr.	Br.	Gr.	Br.
Adams	162	11	19	9	9	2	16	25	17	15	8	7	24	162	. .	148	154	14	8	. . .	. . .
Allen	391	54	47	34	38	16	25	21	39	38	17	23	39	389	2	275	307	105	83	11	1
Bartholomew	220	34	13	25	12	15	20	24	27	11	10	11	18	217	3	182	192	14	2	24	26
Benton	72	2	12	14	9	10	6	1	7	1	1	3	6	72	. .	44	46	4	2	24	24
Blackford	85	6	11	8	7	7	2	7	5	4	6	11	11	85	. .	85	85	. . .	. . .	. . .	. . .
Boone	205	27	20	13	14	11	18	17	11	10	20	15	29	204	1	195	198	5	3	5	4
Brown	97	7	12	7	8	12	12	8	3	4	12	6	6	97	. .	47	47	. . .	. . .	50	50
Carroll	153	24	13	8	11	11	18	19	9	7	8	16	9	153	. .	151	151	1	1	1	1
Cass	255	31	20	19	30	17	19	19	16	18	17	18	31	254	1	76	79	26	23	153	153
Clark	526	62	54	47	35	36	44	36	42	47	34	38	51	492	34	110	110	4	4	412	412
Clay	213	32	17	13	15	19	18	14	18	11	16	18	22	204	9	165	184	47	27	1	2
Clinton	143	14	21	15	16	14	15	2	4	7	8	15	12	143	. .	143	142	. . .	. . .	. . .	1
Crawford	114	18	10	5	10	12	14	10	11	12	2	8	2	114	. .	86	88	2	. . .	26	26
Daviess	143	22	10	18	14	13	15	7	6	8	9	9	12	142	1	133	137	10	6	. . .	. . .
Dearborn	230	30	16	24	20	19	19	23	21	19	14	10	15	230	. .	. . .	. . .	. . .	. . .	230	230
Decatur	86	4	2	12	7	13	11	4	5	7	2	8	11	84	2	72	74	10	8	4	4
Dekalb	183	16	16	18	15	13	21	15	14	14	11	9	21	183	. .	159	165	14	8	10	10
Delaware	237	22	24	32	21	13	20	21	13	16	19	14	22	233	4	231	235	4	. . .	2	2
Dubois	149	13	32	12	11	10	5	18	6	21	3	9	9	149	. .	141	144	7	4	1	1
Elkhart	275	36	26	6	19	23	33	41	12	14	18	26	21	274	1	254	255	18	15	3	5

TABLE No. VI—Continued.

COUNTIES.	Whole Number.	1884.			1885.									Color.		Nationality.					
		Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June	July.	Aug.	Sept.	White.	Colored.	American.		Foreign.		Not Reported.	
																Gr.	Br.	Gr.	Br.	Gr.	Br.
Fayette	103	13	11	10	7	8	10	6	4	3	7	11	13	102	1	94	99	9	4	...	...
Floyd	256	29	16	24	36	20	12	7	12	22	30	30	18	247	9	175	183	34	26	47	47
Fountain	197	23	17	30	24	10	13	21	6	19	8	14	12	197	...	180	178	5	5	12	14
Franklin	120	25	15	9	21	10	6	14	12	8	...	...	...	120	...	116	117	3	2	1	1
Fulton	142	18	12	29	12	8	17	9	5	8	9	8	7	142	...	139	140	3	2	...	...
Gibson	195	29	6	13	26	13	7	20	18	7	11	17	28	181	14	140	145	7	1	48	49
Grant	262	17	24	30	21	14	28	18	21	19	11	26	33	248	14	262	261	...	1	...	...
Greene	148	16	5	4	8	24	30	3	10	11	6	13	18	148	...	147	148	1	...	...	...
Hamilton	211	31	19	15	14	21	21	13	11	3	16	18	29	201	10	208	207	1	...	2	4
Hancock	152	8	19	12	15	8	16	18	8	3	9	20	16	152	...	146	148	5	1	1	3
Harrison	209	14	17	18	20	14	12	5	20	26	11	7	45	202	7	189	195	13	6	7	8
Hendricks	142	12	14	14	15	9	15	18	12	8	1	9	15	138	4	134	135	4	3	4	4
Henry	222	18	25	37	14	18	21	19	11	14	11	20	14	218	4	222	222	...	...	...	...
Howard	215	31	23	16	14	18	13	16	18	10	15	24	17	213	2	212	213	2	2	1	...
Huntington	243	37	27	20	24	14	28	14	15	20	9	13	22	243	...	229	236	13	6	1	1
Jackson	207	15	15	13	9	18	25	22	19	15	7	24	25	206	1	188	193	15	11	4	3
Jasper	76	10	7	5	14	2	6	11	4	4	5	6	2	76	...	69	71	7	5	...	...
Jay	192	24	20	14	20	11	23	4	12	15	16	11	22	192	...	168	181	24	11	...	...
Jefferson	205	29	14	11	9	17	13	23	20	12	14	18	25	205	...	...	...	...	...	205	205
Jennings	123	21	8	4	12	8	20	12	3	3	10	8	14	120	3	119	119	3	3	1	1
Johnson	136	20	9	11	12	16	9	7	7	15	5	11	14	134	2	95	95	1	1	40	40
Knox	272	28	37	27	18	21	27	27	25	13	8	12	29	269	3	203	204	13	12	56	56
Kosciusko	254	12	27	37	32	20	35	16	12	12	18	17	16	254	...	250	247	4	7	...	...
Lagrange	81	7	8	5	10	5	9	10	8	3	5	5	6	81	...	64	64	2	2	15	15
Lake	158	14	11	8	18	12	21	14	4	13	8	15	20	158	...	102	115	55	41	1	2
Laporte	221	21	26	26	18	24	14	20	13	11	13	11	24	218	3	155	163	64	56	2	2
Lawrence	128	26	14	10	12	14	5	15	8	11	...	1	12	126	2	122	120	4	4	2	4
Madison	288	21	23	29	21	14	25	25	23	14	25	31	37	288	...	281	286	7	2	...	...
Marion	1586	98	102	65	147	151	160	141	139	150	135	142	156	1299	287	1395	1420	176	153	15	13
Marshall	168	12	19	22	6	11	10	18	11	9	9	20	21	168	...	163	162	5	6	...	...
Martin	101	6	6	18	14	5	10	11	5	4	7	7	8	101	...	95	98	6	3	...	...

Miami	250	16	23	17	25	20	36	21	13	16	13	22	28	247	3	239	242	9	6	2	2
Monroe	159	11	11	8	13	13	19	18	16	13	12	13	12	156	3	159	155	. . .	4	. . .	. . .
Montgomery	203	13	20	20	19	33	18	7	9	12	15	11	26	203	. .	. . .	. . .	. . .	. . .	203	203
Morgan	109	9	14	. . .	10	5	. . .	3	14	3	7	21	23	109	. .	67	53	. . .	. . .	42	56
Newton	61	11	5	3	5	8	6	2	1	1	2	10	7	61	. .	47	47	14	14	. . .	. . .
Noble	175	21	12	21	13	11	18	15	14	11	8	15	16	175	. .	163	144	11	10	1	21
Ohio	57	8	4	6	3	5	5	8	4	7	3	2	2	57	. .	8	8	. . .	. . .	49	49
Orange	118	12	4	11	17	3	10	20	4	5	7	10	15	118	. .	59	59	. . .	. . .	59	59
Owen	104	6	10	8	8	12	4	17	8	2	8	9	12	103	1	102	100	1	3	1	1
Parke	171	31	16	25	12	5	14	12	8	5	9	14	20	166	5	166	165	5	6	. . .	. . .
Perry	168	13	33	22	15	7	7	8	24	15	7	7	10	165	3	142	156	17	3	9	9
Pike	151	12	14	27	8	18	6	12	5	14	9	9	17	151	. .	148	148	3	3	. . .	. . .
Porter	173	13	9	9	11	19	19	28	7	7	24	17	10	172	1	85	86	44	43	44	44
Posey	224	26	19	26	23	8	19	18	13	13	19	14	26	209	15	212	219	12	5	. . .	. . .
Pulaski	79	7	8	6	8	6	10	6	9	7	3	5	4	79	. .	72	73	6	5	1	1
Putnam	185	40	15	13	30	8	10	13	5	7	12	17	15	182	3	179	181	6	4	. . .	. . .
Randolph	252	24	22	23	30	19	23	21	14	15	16	20	25	246	6	246	249	6	3	. . .	. . .
Ripley	142	15	14	3	20	6	18	15	8	12	7	8	16	141	1	107	108	35	34	. . .	. . .
Rush	119	12	3	6	11	16	5	9	11	6	8	10	22	118	1	91	92	1	. . .	27	27
Scott	51	2	10	3	1	2	4	4	5	5	4	3	8	51	. .	51	51	. . .	. . .	. . .	. . .
Shelby	240	25	31	27	16	19	22	10	18	13	12	22	25	235	5	194	201	35	27	11	12
Spencer	268	40	26	18	21	22	23	27	19	21	22	14	15	248	20	252	262	14	4	2	2
Starke	52	6	5	6	1	2	1	8	7	2	3	7	4	52	. .	33	37	18	14	1	1
Steuben	104	5	6	17	9	8	7	8	3	3	22	3	13	104	. .	92	95	3	. . .	9	9
St. Joseph	257	20	33	18	32	25	12	12	18	22	22	12	31	255	2	176	177	78	79	3	1
Sullivan	218	15	14	16	17	16	16	10	22	23	18	22	29	216	2	150	148	19	21	49	49
Switzerland	150	23	15	16	17	12	15	12	4	7	9	9	11	144	6	149	150	1	. . .	. . .	. . .
Tippecanoe	325	26	32	37	22	24	32	24	24	19	36	36	13	317	8	232	242	44	31	49	52
Tipton	133	9	22	14	10	10	7	9	8	6	7	13	18	133	. .	125	126	1	. . .	7	7
Union	37	6	4	5	4	. . .	1	1	5	1	3	4	3	37	. .	26	26	1	1	10	10
Vanderburgh	472	44	33	55	33	27	22	60	32	48	31	49	38	413	59	381	411	82	51	6	10
Vermillion	84	10	8	8	12	6	10	4	2	2	3	10	9	84	. .	80	82	3	1	1	1
Vigo	470	45	46	44	27	26	34	58	27	36	31	38	58	457	13	411	426	58	42	1	2
Wabash	211	26	24	22	24	13	15	25	13	16	8	12	13	210	1	204	206	3	1	4	4
Warren	56	6	5	6	15	4	4	2	2	3	6	1	2	56	. .	38	38	1	1	17	17
Warrick	193	4	22	10	22	34	1	24	18	13	11	13	21	190	3	180	182	13	11	. . .	. . .
Washington	150	25	10	15	8	9	7	15	3	7	23	9	19	150	. .	143	143	6	6	1	1
Wayne	342	32	22	48	34	26	34	23	23	23	18	31	28	320	22	316	318	21	16	5	8
Wells	174	10	19	12	27	14	14	10	14	8	9	17	20	174	. .	135	138	39	36	. . .	. . .
White	130	10	13	13	18	14	16	11	8	1	8	7	11	130	. .	124	126	3	2	3	2
Whitley	164	20	5	8	22	18	15	21	17	8	3	12	15	164	. .	162	163	2	1	. .	. . .
Total	18133	1859	1652	1597	1637	1397	1571	1540	1261	1227	1172	1421	1799	17526	607	14708	14991	1386	1058	2039	2084

TABLE No. VII.

GROUPED AGES.

Showing Total Number of Marriages and Grouped Ages, for the Year Ending September 30, 1885.

COUNTIES.	Whole Number.	Grouped Ages.																			
		Under 20.		20 to 25.		25 to 30.		30 to 40.		40 to 50.		50 to 60.		60 to 70.		70 to 80.		Over 80.		Not Reported.	
		Gr.	Br.	Gr.	Br.	Gr.	Br.	Gr.	Br.	Gr.	Br.	Gr.	Br.	Gr.	Br.	Gr.	Br.	Gr.	Br.	Gr.	Br.
Adams	162	5	49	78	83	50	17	16	9	7	3	4	...	1	1	...	...	...	...	1	...
Allen	391	...	65	134	205	150	64	66	29	22	13	13	8	3	1	1	...	...	...	2	6
Bartholomew	220	4	42	66	85	74	38	33	19	10	4	4	2	3	...	...	...	...	...	26	30
Benton	72	1	12	25	31	13	5	14	7	2	1	1	...	...	...	...	...	...	...	16	16
Blackford	85	...	30	37	33	27	10	12	4	9	1	...	...	...	...	...	...	...	...	...	7
Boone	205	6	73	91	78	54	25	29	12	9	6	9	4	4	2	2	1	...	...	1	4
Brown	97	2	31	29	25	22	7	11	4	2	...	2	...	...	...	1	...	...	...	28	30
Carroll	153	1	36	60	72	50	24	29	18	7	2	3	1	2	...	1	...	...	...	...	...
Cass	255	...	24	36	40	32	20	24	14	4	3	3	1	3	...	...	...	...	...	153	153
Clark	526	1	24	37	51	45	26	14	6	6	7	5	...	2	...	1	...	...	...	415	412
Clay	213	13	88	89	58	48	27	32	22	10	9	13	7	4	...	2	...	...	...	2	2
Clinton	143	2	43	50	63	58	21	16	3	3	5	3	2	1	...	...	...	...		10	6
Crawford	114	1	44	48	42	41	14	13	7	6	2	1	1	1	...	...	...	...	...	3	4
Daviess	143	1	41	56	56	47	25	23	12	5	6	8	2	2	...	...	...	...	...	1	1
Dearborn	230	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	230	230
Decatur	86	2	22	30	36	32	18	15	6	3	2	2	...	2	2	...	...	...	...	...	...
DeKalb	183	...	44	61	73	71	33	25	12	7	7	4	2	3	...	1	...	...	...	11	12
Delaware	237	3	82	98	90	82	32	33	17	9	9	6	4	5	1	...	...	...	...	1	2
Dubois	149	6	42	70	76	46	15	17	11	6	3	2	...	...	...	...	...	...	...	2	2
Elkhart	275	11	106	122	92	73	43	41	15	16	12	8	1	2	1	...	...	...	...	2	5

Fayette	103	...	22	35	43	34	17	26	14	4	3	1	3	2	1	...	...	1	...	...	...
Floyd	256	7	37	61	97	76	45	45	15	10	7	7	3	2	1	...	...	1	...	47	51
Fountain	197	3	49	80	88	44	18	36	16	12	4	3	1	4	1	...	...	...	...	15	20
Franklin	120	1	16	31	48	48	35	24	14	9	5	4	1	1	...	...	...	...	...	2	1
Fulton	142	1	43	59	64	44	15	26	13	5	6	6	1	1	...	...	...	...	...	...	...
Gibson	195	3	55	77	79	50	30	39	17	13	7	9	4	3	1	1	...	...	...	...	2
Grant	262	12	162	129	96	64	31	32	19	11	9	8	2	4	2	1	...	...	...	1	1
Greene	148	3	48	50	61	50	19	22	13	10	7	12	...	...	...	...	...	...	...	1	...
Hamilton	211	6	73	90	80	60	36	34	12	13	4	3	2	2	...	...	...	...	...	3	4
Hancock	152	1	34	48	47	31	10	13	9	6	3	5	2	3	3	1	...	...	...	44	44
Harrison	209	8	50	75	98	64	34	34	12	11	9	7	3	5	2	1	...	...	...	4	1
Hendricks	142	6	42	69	54	23	17	25	16	8	8	3	...	2	...	...	...	...	...	6	5
Henry	222	4	49	73	91	76	44	42	27	16	7	6	1	2	1	2	1	...	...	1	1
Howard	215	3	71	83	75	76	46	30	12	11	6	7	2	4	1	1	...	...	...	...	2
Huntington	243	6	75	85	102	93	36	39	19	8	4	4	4	6	1	...	...	...	...	2	2
Jackson	207	3	56	78	81	57	33	41	23	17	9	5	2	2	...	...	...	...	...	4	3
Jasper	76	...	30	19	29	34	6	13	6	3	2	3	1	2	2	1	...	...	...	1	...
Jay	192	...	57	83	77	61	33	32	16	9	5	4	3	2	1	1	...	...	...	...	...
Jefferson	205	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	205	205
Jennings	123	2	38	34	41	50	24	22	9	4	1	3	4	2	1	2	...	...	...	4	5
Johnson	136	...	26	44	47	30	14	14	2	1	3	3	1	...	...	...	...	...	...	44	43
Knox	272	1	50	70	87	72	49	44	19	21	7	5	3	3	1	...	...	...	...	56	56
Kosciusko	254	2	65	108	117	78	36	39	12	8	9	3	4	8	4	2	...	...	...	6	7
Lagrange	81	1	20	34	42	29	16	16	3	1	...	...	...	...	...	...	...	...	...	...	...
Lake	158	2	24	50	75	60	35	28	12	8	5	3	5	4	...	1	1	...	...	2	1
Laporte	221	...	43	95	132	68	24	40	16	11	4	4	1	...	...	1	...	...	...	2	1
Lawrence	128	5	29	43	62	34	16	28	9	6	6	3	3	5	1	2	1	...	...	2	1
Madison	288	6	101	108	109	100	46	41	15	13	7	5	2	3	2	2	...	...	...	10	6
Marion	1586	17	244	354	610	504	392	400	227	223	88	60	13	15	4	8	...	1	...	9	8
Marshall	168	3	42	66	81	66	27	17	10	5	4	4	2	3	...	1	...	...	...	3	2
Martin	101	2	29	46	51	31	15	14	2	4	4	...	...	3	...	...	...	...	...	1	...
Miami	250	3	85	106	89	63	38	52	29	13	1	6	3	4	1	1	...	...	...	2	4
Monroe	159	4	50	56	61	55	32	29	8	10	6	2	...	2	1	...	...	...	...	1	1
Montgomery	203	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	203	203
Morgan	109	1	39	38	36	28	15	22	9	4	5	4	1	3	2	...	1	...	...	9	1
Newton	61	...	22	28	25	21	10	8	3	2	...	...	1	2	...	...	...	...	...	...	...
Noble	175	2	34	59	87	65	29	26	12	9	7	7	4	3	2	2	...	1	...	1	...
Ohio	57	...	8	10	15	17	7	3	4	3	2	1	...	...	...	1	...	...	...	22	21
Orange	118	5	36	57	57	27	15	19	4	4	1	3	...	...	...	...	...	...	...	3	5
Owen	104	1	35	41	41	27	14	16	6	8	2	4	2	3	...	...	...	...	...	4	4
Parke	171	2	52	64	69	48	26	37	14	9	6	6	2	3	...	...	...	...	...	2	2
Perry	168	3	47	75	71	44	18	16	11	8	8	7	2	4	1	1	...	...	...	10	10
Pike	151	3	51	60	46	37	22	31	21	10	9	7	...	2	...	1	...	...	...	...	2
Porter	173	1	39	54	69	61	28	33	20	8	1	7	4	3	1	...	...	...	...	6	11
Posey	224	3	61	88	87	76	31	32	24	16	10	4	...	...	...	...	...	...	...	5	11

TABLE No. VII—Continued.

COUNTIES.	Whole Number.	Grouped Ages.																			
		Under 20.		20 to 25.		25 to 30.		30 to 40.		40 to 50.		50 to 60.		60 to 70.		70 to 80.		Over 80.		Not Reported.	
		Gr.	Br.	Gr.	Br.	Gr.	Br.	Gr.	Br.	Gr.	Br.	Gr.	Br.	Gr.	Br.	Gr.	Br.	Gr.	Br.	Gr.	Br.
Pulaski	79	4	21	32	38	27	13	11	3	2	1	1	2	...	...	1	...	...	...	1	1
Putnam	185	4	54	62	69	56	29	38	16	15	7	7	3	2	1	...	...	...	...	1	6
Randolph	252	8	103	108	84	83	42	34	11	10	8	6	3	3	...	...	...	...	...	...	1
Ripley	142	1	33	45	56	61	36	25	6	5	5	1	3	3	...	...	...	...	...	1	3
Rush	119		5	11	15	8	4	7	2	1	1	1	...	...	...	...	...	...	...	91	92
Scott	51	1	10	19	24	13	10	8	4	7	2	1	1	...	...	...	...	...	...	2	...
Shelby	240	4	63	92	79	63	51	48	27	17	5	4	1	3	2	3	...	...	...	6	12
Spencer	268	3	88	129	111	76	51	37	10	14	4	6	4	2	...	1	...	...	...	...	...
Starke	52	...	17	21	20	13	7	10	4	4	1	1	1	1	1	...	...	...	...	2	1
Steuben	104	...	30	29	38	36	12	18	8	4	4	6	1	2	...	...	...	...	...	9	11
St. Joseph	257	6	73	96	110	90	36	40	25	11	8	10	3	1	1	2	...	...	...	1	1
Sullivan	218	3	66	81	107	80	22	29	12	17	4	4	6	2	1	2	...	...	...	...	...
Switzerland	150	4	33	54	70	47	25	27	13	9	4	4	1	1	1	1	...	...	...	3	3
Tippecanoe	325	6	71	106	139	118	73	58	20	19	16	12	2	2	...	2	...	...	...	2	4
Tipton	133	3	39	49	49	46	20	21	12	5	7	2	1	2	...	...	...	...	...	5	5
Union	37	...	8	7	8	13	7	5	1	...	1	...	...	...	...	...	...	...	...	12	12
Vanderburgh	472	3	93	162	217	162	74	76	45	30	16	15	8	6	...	...	1	...	...	18	18
Vermillion	84	2	26	22	32	42	16	10	5	4	3	2	1	1	...	...	...	...	...	1	1
Vigo	470	5	101	137	184	156	86	102	63	42	21	15	8	5	2	3	...	...	...	5	5
Wabash	211	2	52	82	105	69	18	27	13	8	9	6	2	3	...	...	...	...	...	14	12
Warren	56	1	21	28	21	11	5	9	3	2	1	2	...	...	...	...	1	...	...	3	4
Warrick	193	6	46	82	76	53	25	13	12	5	3	2	1	1	...	...	...	...	...	31	30
Washington	150	1	43	54	43	41	22	14	9	7	6	6	1	1	...	...	...	...	...	26	26
Wayne	342	9	75	119	156	110	65	67	28	18	10	9	3	7	1	...	...	...	...	3	4
Wells	174	9	63	76	70	49	24	21	11	9	6	8	..	2	...	...	...	...	...	...	...
White	130	2	25	44	55	36	23	27	18	12	6	3	...	2	1	1	...	...	...	3	2
Whitley	164	7	51	74	73	57	21	13	7	7	9	3	...	3	1	...	...	...	...	...	2
Total	18133	289	4387	6051	6855	5307	2765	2838	1389	1012	564	476	183	215	58	54	7	4	...	1887	1925

The registration of births shows that the total number of children born during the year was 38,171, of which 1,024 were still-born; 19,790 were males and 18,381 were females; 897 of the whole number given were colored.

The number of double and triple births within the year was 873; illegitimate births, 635. The majority of the fathers were between thirty and forty years of age. There were, however, twenty-five fathers who were over seventy-five years old. The majority of mothers were from twenty to thirty years of age.

TABLE No. VIII.

BIRTHS.

Number of Births, Male and Female, by Months, for the Year Ending September 30, 1885.

COUNTIES.	1884.						1885.																						Males.	Females.	Whole Number.
	Oct.		Nov.		Dec.		Jan.		Feb.		Mar.		April.		May.		June.		July.		Aug.		Sept				
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.			
Adams	16	10	7	9	20	7	9	8	10	9	8	7	17	10	12	9	7	7	15	5	6	12	11	9	138	102	240
Allen	54	40	62	32	42	49	47	35	17	13	34	20	12	11	19	11	37	24	38	40	35	33	36	41	433	359	792
Bartholomew	20	17	29	13	27	24	30	31	25	31	37	27	16	20	18	29	12	21	18	26	40	35	28	27	300	301	601
Benton	9	10	12	8	15	6	10	15	12	13	12	17	6	7	9	5	10	6	4	12	13	8	19	11	131	118	249
Blackford	11	4	8	6	10	9	10	9	6	9	4	12	9	5	9	9	6	8	7	3	20	15	8	7	108	96	204
Boone	29	25	20	16	17	11	23	15	23	21	23	17	34	23	27	26	28	29	24	30	41	35	36	44	325	292	617
Brown	10	15	4	16	8	3	14	11	14	11	13	10	13	15	9	6	3	5	15	18	11	12	9	10	123	132	255
Carroll	16	16	13	17	22	17	26	24	13	17	18	17	26	27	22	20	12	14	19	22	27	21	22	20	236	232	468
Cass	21	20	17	20	24	29	22	9	18	17	17	15	3	3	14	13	11	8	13	11	20	19	27	18	207	182	389
Clark	16	14	18	13	15	9	18	16	15	18	24	19	12	14	19	15	15	10	16	14	17	8	19	13	204	163	367
Clay	12	12	10	20	8	12	46	31	23	19	29	26	34	27	22	32	31	27	23	27	25	28	17	23	280	284	564
Clinton	17	11	16	9	6	8	16	12	12	4	8	5	8	15	9	6	1	5	6	7	16	5	6	6	124	93	217
Crawford	26	20	9	7	10	8	14	15	9	8	8	8	8	6	11	4	9	8	2	4	14	16	5	7	125	111	236
Daviess	23	28	15	9	11	9	20	22	27	22	17	19	16	12	17	16	17	33	16	27	21	20	19	21	219	238	457
Dearborn	13	19	15	15	47	18	21	9	15	14	28	20	20	14	19	19	23	17	20	24	17	21	11	11	219	201	420
Decatur	15	21	16	18	11	17	15	20	24	14	17	19	16	15	10	12	2	10	20	16	16	17	18	22	180	201	381
Dekalb	14	9	8	11	9	3	9	8	11	10	7	8	19	14	11	17	10	9	6	7	19	17	7	14	130	127	257
Delaware	25	21	23	23	21	23	18	28	32	27	33	31	26	23	20	14	22	21	25	27	31	27	28	29	304	294	598
Dubois	19	20	21	21	8	21	20	12	27	27	20	22	23	17	20	20	18	12	19	14	22	12	30	23	247	221	468
Elkhart	14	18	24	21	13	20	17	16	15	12	19	19	2	2	8	11	15	15	32	23	15	17	12	16	186	190	376

Fayette	9	12	9	9	3	4	12	6	12	7	9	11	7	14	15	14	8	9	5	9	15	12	11	12	115	119	234
Floyd	22	22	15	14	16	23	35	33	20	20	31	26	22	20	34	26	29	27	30	27	24	24	29	32	307	294	601
Fountain	10	8	8	18	11	10	18	19	9	11	14	16	8	18	10	14	16	18	12	11	16	17	18	13	150	173	323
Franklin	8	2	10	5	4	5	5	5	2	5	3	3	2	1	1	3	1	2	4	5	9	10	2	8	51	54	105
Fulton	15	11	2	2	20	16	14	2	7	8	17	7	15	12	2	3	8	2	14	7	13	9	9	8	136	87	223
Gibson	20	23	22	16	15	13	34	28	18	31	25	17	31	17	19	18	10	18	28	21	29	12	19	16	270	230	500
Grant	23	25	22	16	16	19	25	22	23	27	27	17	36	32	26	25	18	13	23	19	19	24	12	16	270	255	525
Greene	22	21	19	26	30	15	8	10	13	16	24	29	18	16	21	11	20	12	17	21	12	11	15	11	219	199	418
Hamilton	42	32	39	21	25	28	26	29	30	43	28	38	33	25	32	33	26	35	29	33	33	33	41	32	384	382	766
Hancock	26	15	14	10	13	9	17	18	22	15	17	26	26	29	21	22	23	14	16	12	22	27	25	17	242	214	456
Harrison	9	12	13	17	24	26	7	11	19	18	25	19	24	24	27	10	11	21	22	16	12	19	24	26	217	219	436
Hendricks	25	16	23	28	22	23	18	22	18	26	17	17	20	29	28	19	23	31	28	27	19	26	37	26	278	290	568
Henry	33	25	26	16	26	28	25	24	30	31	30	24	25	25	26	27	32	19	32	23	17	35	19	20	321	297	618
Howard	27	24	10	10	22	17	15	9	13	17	22	22	21	28	19	22	16	21	19	24	27	14	23	28	234	236	470
Huntington	37	25	23	21	20	27	32	24	18	20	26	29	18	18	23	16	17	24	21	32	31	36	21	22	287	291	581
Jackson	25	26	18	20	10	10	21	20	26	31	30	28	17	21	21	17	22	15	24	14	24	16	30	26	268	243	511
Jasper	9	9	7	4	13	5	10	15	10	10	7	14	9	9	11	8	5	12	9	11	12	7	12	7	114	111	225
Jay	15	11	21	25	22	23	23	16	25	18	15	22	28	18	14	11	14	16	38	18	32	27	29	26	276	231	507
Jefferson	5	7	1	7	4	5	27	14	19	20	10	8	15	13	15	13	8	9	14	10	13	10	9	3	140	119	259
Jennings	16	12	7	15	12	11	12	8	18	11	10	8	15	12	10	9	7	8	13	8	15	11	9	10	144	123	267
Johnson	19	24	23	23	18	16	29	26	18	18	24	23	20	28	20	18	15	21	13	12	25	18	22	23	246	250	496
Knox	7	6	8	5	6	9	14	12	20	26	18	15	21	18	11	13	16	9	23	20	25	31	32	30	201	194	395
Kosciusko	23	5	15	16	11	12	27	10	20	17	34	18	30	18	36	19	19	15	15	21	20	22	16	9	266	182	448
Lagrange	12	13	13	8	5	6	10	5	12	14	10	8	7	13	13	10	16	10	7	8	9	4	9	10	123	109	232
Lake	12	7	16	2	16	13	12	18	10	8	15	12	12	15	17	12	7	10	11	7	12	7	15	11	155	122	277
Laporte	16	19	24	16	17	15	25	15	27	17	26	27	24	25	22	20	27	22	18	18	19	29	21	25	266	248	514
Lawrence	27	16	8	16	11	11	10	8	8	7	8	9	13	13	16	13	12	16	18	11	14	16	16	18	161	154	315
Madison	48	38	33	31	32	40	39	39	31	25	38	33	43	43	33	31	33	21	38	32	39	40	39	46	446	419	865
Marion	94	105	71	71	93	89	99	99	97	103	113	127	80	81	85	84	85	91	91	94	103	107	103	103	1114	1154	2268
Marshall	9	8	4	4	3	5	7	8	14	10	12	7	12	8	9	14	7	3	14	11	14	14	15	7	120	99	219
Martin	8	15	17	24	9	4	6	10	6	8	14	4	6	8	5	6	13	8	11	9	14	6	10	7	119	109	228
Miami	32	19	17	14	15	14	31	25	19	24	29	21	28	29	23	25	15	19	17	22	22	17	20	25	268	254	522
Monroe	15	12	12	4	9	4	14	29	26	17	34	24	17	16	16	24	11	10	17	12	24	12	12	15	207	178	385
Montgomery	26	21	18	19	26	14	13	9	19	14	34	32	29	20	11	18	4	10	42	41	15	18	7	15	244	231	475
Morgan	20	26	9	4	6	5	7	7	7	7	9	12	14	7	15	18	27	23	11	9	10	10	17	13	152	141	293
Newton	9	10	6	12	5	8	9	7	10	7	7	9	10	6	7	11	5	9	5	6	8	4	7	5	88	94	182
Noble	13	6	11	9	18	9	3	4	5	10	3	4	12	8	9	10	3	3	2	7	5	7	13	12	97	89	186
Ohio	5	6	2	3	4	1	8	4	3	3	8	4	3	1	8	4	4		7	3	5	4	5	2	62	35	97
Orange	4	4	13	7	12	14	7	13	3	4	7	9	2	7	13	14	4	6	6	1	16	15	18	27	105	121	226
Owen	15	10	5	9	9	8	8	14	17	13	14	10	13	8	12	15	8	10	10	16	9	9	15	13	135	135	270
Parke	26	16	15	10	15	18	19	8	11	16	6	12	11	11	13	8	6	8	12	14	12	13	22	12	168	146	314

TABLE No. VIII—Continued.

COUNTIES.	1884.						1885.																								Males.	Females.	Whole Number.
	Oct.		Nov.		Dec.		Jan.		Feb.		Mar.		April.		May.		June.		July.		Aug.		Sept.				
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.			
Perry	14	11	7	10	14	10	14	12	9	9	17	16	21	14	4	6	8	7	11	15	14	13	17	21	150	144	294
Pike	22	11	14	13	13	12	8	6	13	12	18	15	15	11	10	4	7	6	14	11	10	11	8	13	152	125	277
Porter	11	15	8	6	12	6	18	15	7	8	10	11	14	20	9	6	6	5	20	18	27	13	6	6	129	129	258
Posey	47	30	18	19	27	18	29	35	32	13	33	22	35	31	23	22	9	16	21	18	8	37	34	34	335	295	630
Pulaski	18	12	5	4	2	2	9	10	15	5	12	11	8	7	4	4	1	7	6	10	3	11	14	6	97	89	186
Putnam	18	19	13	12	23	21	19	18	21	20	13	15	23	24	21	17	15	19	26	25	19	15	19	19	230	224	454
Randolph	23	24	30	25	28	25	27	25	30	31	28	30	41	29	27	19	20	21	17	33	34	29	37	39	342	330	672
Ripley	17	12	4	15	8	8	22	12	15	11	12	6	6	4	14	7	9	13	21	10	8	7	15	12	151	117	268
Rush	21	19	12	14	15	10	31	22	18	12	24	20	31	32	25	25	22	11	26	20	17	16	10	9	252	210	462
Scott	13	9	2	5	5	8	4	6	7	7	12	6	12	7	7	7	7	11	1	3	2	2	4	6	76	77	153
Shelby	11	18	9	10	15	18	23	15	15	12	17	14	18	15	11	8	10	4	6	11	19	13	9	12	163	150	313
Spencer	13	21	28	15	27	16	15	23	19	10	24	17	16	15	19	11	10	8	24	28	27	22	31	24	253	210	463
Starke	3	2	1	2	3	2	2	1	1	3	..	2	2	..	2	2	5	3	1	1	4	1	1	..	25	19	44
Steuben	9	13	2	1	8	4	4	2	4	5	6	7	7	9	3	10	3	4	5	2	3	2	1	7	55	66	121
St. Joseph	29	16	30	27	27	24	34	29	27	22	35	37	26	33	17	21	19	13	33	26	40	33	31	25	348	306	654
Sullivan	31	29	39	31	50	40	18	23	29	25	27	33	38	22	43	35	47	29	25	23	28	23	30	32	405	345	750
Switzerland	11	8	7	3	8	4	15	8	8	14	13	8	7	12	13	6	5	5	9	10	6	12	9	11	111	101	212
Tippecanoe	10	14	17	15	14	11	22	14	55	29	8	18	18	18	15	21	12	6	37	23	38	23	27	26	273	218	491
Tipton	13	16	14	12	14	8	4	4	18	23	11	11	21	18	10	5	8	9	15	12	20	19	23	28	171	165	336
Union	6	4	4	1	2	3	2	4	2	6	4	1	5	6	2	3	2	2	6	4	1	5	4	3	40	42	82
Vanderburgh	35	38	38	34	45	55	52	42	56	36	43	33	43	41	37	35	24	19	36	36	29	43	36	51	474	463	937
Vermillion	3	7	3	2	2	4	8	10	11	6	15	16	10	12	9	11	10	7	9	11	5	14	9	6	94	106	200
Vigo	44	45	31	34	61	43	38	38	44	55	46	39	43	36	43	42	46	41	47	49	51	51	43	41	537	514	1051
Wabash	15	7	11	12	22	34	6	16	10	5	10	8	19	17	5	14	12	2	9	6	1	3	1	3	121	127	248
Warren	3	5	2	3	10	9	9	12	16	10	21	10	7	9	16	10	8	6	11	10	10	8	11	7	124	99	223
Warrick	7	8	9	8	5	8	27	18	30	16	21	19	29	19	23	17	23	10	23	18	23	30	18	20	238	191	429
Washington	20	11	11	21	18	11	16	18	11	12	9	13	13	13	7	16	12	12	9	6	10	10	10	11	146	154	300

Wayne	43	40	48	30	46	33	40	32	48	44	51	36	24	43	35	35	31	24	35	28	37	30	43	34	481	409	890
Wells	13	10	12	14	9	9	13	14	12	10	16	13	14	10	11	9	12	14	12	9	7	7	9	8	140	127	267
White	7	6	5	7	11	8	13	14	12	9	14	9	12	12	12	10	11	9	12	6	12	10	23	29	144	129	273
Whitley	9	14	16	15	12	17	7	2	11	15	14	18	12	7	8	3	9	5	17	9	17	12	16	12	148	129	277
Total	1757	1568	1446	1331	1538	1416	1735	1550	1689	1574	1810	1652	1707	1590	1559	1443	1366	1287	1668	1570	1770	1686	1745	1714	19790	18381	38171

TABLE No. IX.

BIRTHS.

Births, by Counties, Color and Parentage of Children.

COUNTIES.	COLOR.				PARENTAGE OF CHILDREN.					
	White.		Colored.		American.		Foreign.		Not Reported.	
	Male.	Fem.	Male.	Fem.	Fath.	M'th.	Fath.	M'th.	Fath.	M'th.
Adams	138	102	...	...	195	208	35	23	7	6
Allen	433	357	...	2	427	508	202	156	156	121
Bartholomew	294	295	6	6	508	544	47	14	40	37
Benton	130	118	1	...	183	198	46	34	18	15
Blackford	108	95	...	1	204	204	...	...	...	...
Boone	325	292	...	...	563	587	12	6	34	16
Brown	123	132	...	...	248	253	2	...	3	...
Carroll	236	232	...	...	434	445	21	11	3	2
Cass	206	180	1	2	314	319	67	62	3	3
Clark	194	151	10	12	310	321	48	38	5	4
Clay	274	279	6	5	407	432	129	105	19	18
Clinton	123	92	1	1	202	204	5	4	7	6
Crawford	125	111	...	...	224	223	1	...	8	10
Daviess	217	237	2	1	423	438	20	11	7	1
Dearborn	219	201	...	...	324	343	80	60	15	16
Decatur	179	200	1	1	346	363	28	14	4	1
DeKalb	130	127	...	...	227	232	17	12	11	11
Delaware	299	292	5	2	567	584	21	5	3	2
Dubois	246	221	1	...	386	420	55	26	19	14
Elkhart	185	189	1	1	346	351	13	8	15	15
Fayette	114	116	1	3	211	219	20	13	1	...
Floyd	305	283	2	11	530	539	51	33	17	26
Fountain	150	172	...	1	279	279	20	16	16	20
Franklin	51	54	...	...	87	94	11	3	4	5
Fulton	136	87	...	...	218	218	2	2	...	...
Gibson	263	223	7	7	448	466	31	12	15	16
Grant	264	248	6	7	513	514	3	2	4	4
Greene	219	198	...	1	226	227	1	1	185	184
Hamilton	373	372	11	10	735	734	7	2	12	18
Hancock	242	214	...	...	428	437	9	7	19	12
Harrison	214	215	3	4	387	414	25	6	21	13
Hendricks	272	285	6	5	546	548	8	8	4	2
Henry	314	288	7	9	483	482	13	7	121	128
Howard	231	236	3	...	454	455	4	3	2	2
Huntington	287	294	...	...	491	514	50	36	32	23
Jackson	265	240	3	3	454	475	32	18	20	13
Jasper	114	111	...	...	188	199	23	12	2	2
Jay	275	227	1	4	446	459	16	15	39	27
Jefferson	133	112	7	7	221	224	23	20	13	13
Jennings	139	121	5	2	244	252	12	8	6	2

TABLE No. IX—Continued.

COUNTIES.	COLOR.				PARENTAGE OF CHILDREN.					
	White.		Colored.		American.		Foreign.		Not Reported.	
	Male.	Fem.	Male.	Fem.	Fath.	M'th.	Fath.	M'th.	Fath.	M'th.
Johnson	242	245	4	5	476	481	7	4	4	2
Knox	195	187	6	7	354	353	26	22	14	19
Kosciusko	266	182	...	...	319	321	2	2	126	124
Lagrange	123	109	...	...	220	225	10	4	1	2
Lake	155	122	...	...	159	194	106	73	9	7
Laporte	266	247	...	1	285	319	206	172	17	17
Lawrence	160	154	1	...	274	270	6	2	30	38
Madison	446	417	...	2	819	838	28	15	6	...
Marion	936	950	178	204	1808	1834	356	323	35	42
Marshall	120	99	...	...	190	196	27	21	...	...
Martin	119	109	...	...	148	150	2	...	73	73
Miami	268	254	...	...	432	440	36	27	45	46
Monroe	199	171	8	7	374	377	6	3	...	...
Montgomery	242	231	2	...	446	450	16	14	6	4
Morgan	151	140	1	1	248	249	5	4	38	38
Newton	88	94	...	...	127	132	42	35	12	14
Noble	97	89	...	...	152	159	18	10	13	14
Ohio	61	33	1	2	87	94	10	2	...	1
Orange	103	119	2	2	219	222	...	...	3	...
Owen	135	135	...	...	263	263	1	1	...	...
Parke	165	139	3	7	270	270	12	12	23	23
Perry	147	141	3	3	221	251	62	32	6	6
Pike	150	123	2	2	266	272	2	1	5	...
Porter	127	128	2	1	172	175	70	68	13	12
Posey	329	289	6	6	529	569	85	45	6	6
Pulaski	97	89	...	...	161	164	17	12	8	10
Putnam	220	221	10	3	415	426	25	17	9	6
Randolph	335	324	7	6	612	621	22	18	35	30
Ripley	151	117	...	...	199	204	69	64	...	...
Rush	249	204	3	6	414	419	21	18	24	22
Scott	76	77	...	...	153	153	...	...	...	...
Shelby	161	145	2	5	237	244	25	17	45	46
Spencer	240	201	13	9	420	436	26	15	5	...
Starke	25	19	...	...	34	36	10	8	...	...
Steuben	55	66	...	...	121	120	...	1	...	...
St. Joseph	340	303	8	3	409	441	210	181	26	23
Sullivan	404	344	1	1	694	688	20	38	32	20
Switzerland	111	101	...	...	204	205	3	2	2	2
Tippecanoe	269	216	4	2	277	307	133	99	79	83
Tipton	171	163	...	2	308	316	11	9	16	10
Union	37	42	3	...	77	77	4	4	...	...
Vanderburgh	437	429	37	34	656	729	241	172	28	24
Vermillion	94	106	...	...	184	188	9	2	4	7
Vigo	529	507	8	7	831	901	194	130	7	1
Wabash	121	127	...	...	236	237	10	9	...	...
Warren	124	99	...	...	202	210	13	6	4	3
Warrick	237	188	1	3	392	392	33	33	4	4
Washington	146	154	...	...	297	299	2	...	...	...
Wayne	458	387	23	22	735	780	125	90	15	5
Wells	140	127	...	...	231	230	35	36	...	...
White	144	129	...	...	233	235	20	18	16	16
Whitley	148	129	...	...	250	260	25	15	...	...
Total	19,354	17,920	436	461	32,267	33,348	3654	2719	1754	1608

TABLE

BIR

Births, Grouped Ages of Parents and

COUNTIES.	Whole Number.	Number of Child Born to This Mother.										
		1st.	2d.	3d.	4th.	5th.	6th.	7th.	8th.	9th.	10th.	11th.
Adams	240	63	46	30	31	20	17	9	7	8	1	3
Allen	792	191	160	101	73	55	41	24	19	11	9	5
Bartholomew	601	172	97	90	60	52	42	32	19	14	8	5
Benton	249	64	45	36	27	24	15	13	4	7	2	2
Blackford	204	38	49	43	19	15	12	5	6	2	3	1
Boone	617	165	126	92	67	53	33	26	14	10	10	2
Brown	255	50	50	45	32	26	14	12	11	5	2	1
Carroll	468	100	95	83	58	47	26	21	14	6	6	5
Cass	389	103	62	45	34	35	12	10	8	3	. .	3
Clark	367	107	74	66	38	22	24	11	14	4	. .	1
Clay	564	126	105	97	66	54	42	22	14	10	12	5
Clinton	217	60	46	26	22	13	14	10	4	7	3	2
Crawford	236	53	46	30	30	15	15	10	13	7	6	3
Daviess	457	109	85	58	58	33	42	25	19	7	4	3
Dearborn	420	122	74	71	51	32	27	19	7	8	4	. .
Decatur	381	98	55	64	45	29	25	21	16	12	4	3
Dekalb	257	90	45	48	29	12	10	11	3	4	2	. .
Delaware	598	144	131	73	67	58	37	29	24	20	5	4
Dubois	468	97	73	63	66	56	22	23	17	16	7	9
Elkhart	376	97	87	59	40	32	19	13	7	8	5	1
Fayette	234	62	49	36	28	24	12	10	3	2	5	2
Floyd	601	151	136	90	56	56	41	26	13	12	7	6
Fountain	323	86	70	46	32	28	25	8	16	2	1	. .
Franklin	105	30	17	18	8	6	8	6	3	3	1	1
Fulton	223	67	52	43	17	16	12	4	4	2	4	. .
Gibson	500	116	99	85	52	35	40	31	18	7	3	2
Grant	525	148	112	58	73	36	27	25	7	12	5	4
Greene	418	114	80	51	50	43	26	16	10	4	7	3
Hamilton	766	174	169	126	86	60	47	36	27	16	7	4
Hancock	456	108	91	89	45	44	19	21	12	12	6	1
Harrison	436	82	94	70	49	34	31	22	21	11	4	2
Hendricks	568	142	93	95	73	51	37	25	18	14	8	4
Henry	618	186	135	100	79	29	21	22	17	7	3	6
Howard	470	132	87	75	59	31	37	17	8	8	8	4
Huntington	581	162	118	87	70	57	30	23	15	5	1	5
Jackson	511	129	104	77	53	47	39	18	16	5	5	1
Jasper	225	52	47	33	15	20	16	10	8	8	2	3
Jay	507	133	93	83	59	38	33	20	14	11	7	5
Jefferson	259	65	45	31	28	32	14	17	11	3	1	1
Jennings	267	66	40	47	30	16	18	10	10	7	4	3

No. X.

THS.

Number of Children Born to Each Mother.

12th & over.	Not Rep'td.	Grouped Ages of Parents.															
		Under 20.		20 to 25.		25 to 30.		30 to 40.		40 to 50.		50 to 60		60 to 70	70 to 80	Not Rep'td.	
		F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	F.	F.	M.
3	2	4	17	45	74	63	61	81	71	35	10	1	. .	. .	2	6	4
8	95	. .	39	82	185	192	201	272	219	101	36	12	. .	3	. .	123	105
9	1	2	51	69	167	141	151	243	188	92	32	28	. .	3	. .	17	6
3	7	2	12	37	87	59	63	87	59	32	7	8	6	3	. .	19	11
. .	11	14	8	37	51	59	62	56	53	32	26	1	4	2	2	1	. .
2	17	. .	61	81	191	168	154	209	156	87	30	22	1	1	. .	41	16
3	4	3	34	42	64	71	71	94	62	30	8	4	. .	1	. .	8	14
4	3	1	35	47	129	115	130	190	124	73	33	17	. .	2	. .	13	7
1	73	1	33	51	95	68	63	105	70	34	20	6	. .	2	. .	117	103
4	2	2	22	44	101	97	107	134	91	54	20	7	. .	. .	. .	25	22
5	6	2	86	86	157	141	127	223	135	47	19	15	1	3	1	37	30
1	9	. .	21	24	48	55	59	70	56	35	17	14	2	. .	. .	16	11
2	6	5	30	43	69	71	53	71	60	25	15	5	. .	2	1	10	6
5	9	. .	34	54	115	128	129	147	145	69	18	15	. .	1	. .	36	9
1	4	1	17	52	121	120	113	153	132	58	19	9	. .	. .	1	25	17
6	3	2	28	63	88	100	111	120	105	48	25	14	. .	1	. .	30	21
1	2	. .	32	43	73	66	67	92	50	24	10	8	. .	. .	. .	22	23
1	5	4	73	96	175	169	143	210	167	83	29	14	. .	5	. .	10	4
7	12	2	26	59	113	125	143	182	140	63	31	10	. .	3	. .	16	7
3	5	2	34	44	98	102	103	115	76	44	19	8	. .	1	1	57	44
1	. .	. .	19	34	76	69	71	92	57	28	9	6	. .	2	. .	1	. .
5	2	3	41	85	134	194	219	210	141	69	37	11	1	. .	. .	26	25
2	7	1	28	40	95	89	77	101	85	46	12	7	. .	1	. .	30	18
2	2	1	6	14	34	35	27	23	24	17	7	5	. .	1	. .	6	4
1	1	42	4	58	55	62	66	45	64	12	27	1	4	. .	. .	. .	. .
6	6	3	60	76	130	121	118	177	144	84	32	18	. .	1	. .	14	10
9	9	6	70	100	155	144	121	155	121	64	27	14	. .	3	. .	34	26
5	9	5	45	65	100	117	112	126	111	52	27	24	. .	3	. .	20	17
6	8	9	68	126	226	176	182	299	222	107	41	18	2	3	. .	16	13
4	4	1	24	58	128	98	115	149	117	98	44	24	5	3	2	23	23
9	7	5	35	62	108	107	109	156	135	65	34	17	1	2	. .	19	11
5	3	2	41	72	157	138	141	222	171	89	39	18	. .	6	. .	11	9
3	10	4	52	105	200	177	173	208	139	79	30	14	. .	1	. .	29	23
2	2	1	57	86	125	123	120	156	122	63	29	20	1	4	. .	7	6
4	4	3	44	75	171	154	142	234	171	77	33	13	. .	. .	1	16	12
5	12	1	49	74	134	124	134	183	127	72	20	7	. .	. .	. .	45	42
1	10	1	14	28	65	48	58	74	52	34	13	15	4	5	1	7	7
10	1	2	50	68	139	115	119	182	142	84	29	16	. .	3	. .	31	22
4	7	4	16	28	60	59	63	86	80	43	20	16	. .	. .	. .	21	18
7	9	2	18	28	69	60	58	102	91	47	21	12	. .	1	. .	11	6

TABLE No.

COUNTIES.	Whole Number.	NUMBER OF CHILD BORN TO THIS MOTHER.										
		1st.	2d.	3d.	4th.	5th.	6th.	7th.	8th.	9th	10th.	11th.
Johnson	496	124	81	94	67	47	22	19	7	8	3	4
Knox	395	103	73	56	39	36	25	17	11	8	2	3
Kosciusko	448	59	38	35	23	14	6	6	3	4	. .	. .
Lagrange	232	67	55	37	23	17	13	8	5	3	2	1
Lake	277	60	56	35	39	35	15	15	5	5	4	1
Laporte	514	127	107	69	58	37	33	24	14	16	9	4
Lawrence	315	88	54	42	36	14	18	15	8	9	4	1
Madison	865	189	168	144	92	75	65	43	30	24	12	9
Marion	2268	635	493	381	289	144	73	65	53	31	21	10
Marshall	219	57	42	28	26	20	13	19	6	2	3	1
Martin	228	35	39	31	22	15	16	7	5	9	3	1
Miami	522	129	100	71	58	40	27	22	13	11	4	6
Monroe	385	99	69	51	60	34	25	16	16	4	5	2
Montgomery	475	140	99	76	55	33	20	17	13	6	3	2
Morgan	293	73	64	48	32	14	17	12	6	9	3	2
Newton	182	46	35	31	18	12	13	6	7	9	. .	. .
Noble	186	52	42	30	17	15	14	6	1	2	. .	. .
Ohio	97	24	14	18	11	8	7	8	2	3	1	. .
Orange	226	48	45	36	29	23	18	6	9	3	2	2
Owen	270	65	56	36	25	20	14	16	18	8	2	2
Parke	314	96	58	47	36	23	17	9	4	8	4	1
Perry	294	55	52	52	39	18	19	13	15	7	7	6
Pike	277	49	57	46	37	23	22	12	12	6	1	5
Porter	258	60	66	39	33	19	14	1	9	3	5	3
Posey	630	151	127	91	75	51	31	26	26	20	7	5
Pulaski	186	39	42	33	22	12	7	10	4	5	2	2
Putnam	454	102	99	62	53	27	39	20	22	10	7	3
Randolph	672	165	139	116	82	51	34	27	20	15	8	2
Ripley	268	61	54	45	32	24	19	11	5	3	4	3
Rush	462	124	105	69	51	43	26	16	9	9	3	3
Scott	153	42	25	31	11	10	7	12	6	6	2	1
Shelby	313	74	65	52	39	30	20	12	9	3	3	3
Spencer	463	118	92	55	55	40	27	23	21	16	8	3
Starke	44	7	14	6	6	3	1	1	. .	3	. .	. .
Steuben	121	37	33	18	7	14	6	1	1	. .	1	. .
St. Joseph	654	158	136	114	76	51	36	21	18	13	5	4
Sullivan	750	221	126	98	81	69	58	47	28	11	10	1
Switzerland	212	39	58	35	22	19	13	10	9	4	2	. .
Tippecanoe	491	135	99	73	48	40	28	22	10	8	3	2
Tipton	336	87	64	50	40	31	23	17	10	7	3	. .
Union	82	16	18	13	14	8	5	1	3	3	. .	. .
Vanderburgh	937	232	193	122	98	83	53	48	46	17	6	7
Vermillion	200	49	47	33	14	13	14	9	10	5	3	1
Vigo	1051	260	233	150	121	87	42	53	31	23	16	6
Wabash	248	58	43	33	28	31	12	15	6	7	5	1
Warren	223	65	48	44	19	13	11	7	7	5	1	1
Warrick	429	101	64	54	46	50	32	16	15	21	12	7
Washington	300	72	44	49	39	23	23	11	9	10	5	6
Wayne	890	231	172	128	122	65	59	37	24	22	8	9
Wells	267	62	57	45	30	29	13	14	9	4	1	. .
White	273	67	46	47	36	19	19	14	13	7	1	. .
Whitley	277	71	51	39	39	21	20	14	12	1	3	3
Total	38171	9578	7539	5798	4345	3079	2226	1610	1146	774	411	254

X—Continued.

12th & over.	Not Rept'd.	Grouped Ages of Parents.															
		Under 20.		20 to 25.		25 to 30.		30 to 40.		40 to 50.		50 to 60		60 to 70	70 to 80	Not Rept'd.	
		F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	F.	F.	M.
4	16	3	30	57	142	137	143	191	142	66	19	16	. .	. .	. .	17	11
2	20	. .	26	51	96	89	109	133	98	50	30	23	7	5	. .	43	28
1	259	1	55	76	121	129	112	149	128	58	12	8	. .	2	. .	24	19
. .	1	. .	15	51	65	78	72	49	49	25	19	10	1	. .	. .	18	10
6	1	1	20	45	80	69	78	105	64	32	23	8	1	4	. .	10	8
5	11	1	33	75	156	137	136	164	140	85	24	16	. .	1	. .	29	19
4	22	6	52	55	75	72	70	105	74	30	15	14	2	. .	. .	28	22
8	6	2	86	129	249	217	227	333	235	119	52	29	. .	5	. .	19	4
4	69	11	162	298	673	589	609	846	553	334	147	49	. .	1	. .	71	55
2	. .	. .	21	24	71	59	41	79	65	39	14	8	1	1	. .	7	4
*2	43	. .	22	28	75	75	63	74	50	24	8	14	2	2	. .	6	3
1	40	3	52	83	138	127	127	163	118	64	33	22	6	4	. .	47	39
4	. .	2	31	47	98	93	86	112	96	60	23	16	2	1	. .	49	44
4	7	. .	30	64	134	122	128	142	99	76	46	40	8	5	1	18	23
2	11	3	24	43	97	80	59	76	77	47	15	15	. .	2	. .	25	19
1	4	. .	6	10	48	41	43	62	46	35	16	6	. .	1	. .	26	22
. .	7	. .	9	28	68	50	41	68	47	25	6	1	. .	. .	. .	11	12
1	. .	3	11	11	22	29	29	32	28	18	5	2	. .	1	. .	1	2
1	4	1	10	29	62	55	55	82	75	36	12	5	. .	1	1	12	8
1	7	3	27	43	94	68	51	61	74	39	13	15	. .	2	1	32	5
2	9	2	32	48	100	80	67	92	52	32	20	15	3	2	. .	34	31
2	9	1	16	53	81	72	81	90	65	41	23	15	4	1	. .	16	19
4	3	2	25	35	79	64	67	111	81	37	15	13	. .	1	. .	10	6
2	4	. .	15	37	82	66	59	98	63	31	18	4	. .	1	. .	18	18
8	12	3	56	78	183	184	160	214	182	100	27	21	2	3	1	16	10
6	2	4	13	30	70	51	41	69	47	18	11	6	1	1	. .	7	3
5	5	1	44	66	126	121	114	141	104	73	49	29	. .	7	. .	11	12
3	10	5	84	122	209	171	168	238	154	80	32	11	. .	1	1	40	22
6	1	3	22	26	69	77	72	105	82	34	22	18	. .	2	. .	3	1
1	3	2	36	60	142	131	128	178	125	59	15	15	1	1	1	12	12
. .	. .	4	22	36	40	43	37	38	35	19	12	7	. .	. .	1	5	7
1	2	7	16	57	70	84	83	112	115	30	13	5	. .	1	. .	11	10
5	. .	4	42	63	129	124	115	143	127	76	34	31	4	4	1	5	. .
1	2	. .	1	4	9	6	8	7	4	7	4	2	1	. .	. .	18	17
1	2	. .	13	19	38	30	24	32	26	11	9	. .	. .	. .	. .	29	11
8	14	3	41	67	171	162	182	261	185	93	35	17	. .	2	. .	40	31
. .	. .	6	144	132	261	218	185	190	110	126	39	51	. .	17	3	3	7
1	. .	2	5	26	61	56	48	69	59	26	13	7	. .	. .	. .	23	23
3	20	3	30	45	129	112	133	184	128	74	30	23	4	1	. .	47	35
2	2	2	24	45	103	87	66	118	114	60	15	12	. .	2	. .	9	13
. .	1	. .	4	10	17	23	29	38	27	9	3	. .	. .	1	. .	. .	1
8	24	5	51	95	269	234	245	327	253	154	45	30	9	4	. .	76	53
2	. .	. .	17	22	50	53	48	62	52	33	13	8	. .	. .	1	18	17
3	26	4	81	136	284	250	294	422	203	148	47	25	1	2	. .	45	122
3	6	. .	16	25	67	65	68	80	61	40	27	22	4	5	. .	9	3
3	1	1	22	38	69	63	54	80	62	24	6	6	. .	1	. .	4	4
5	6	1	36	81	115	111	108	154	137	51	21	12	2	2	. .	17	10
2	7	4	28	37	67	82	77	110	84	49	30	5	. .	. .	1	11	13
8	5	7	65	107	246	217	224	350	271	142	68	42	. .	4	. .	6	1
. .	3	4	36	59	76	82	80	50	50	38	23	16	1	3	. .	. .	. .
1	3	1	28	42	74	72	79	94	58	30	17	7	. .	3	. .	20	13
1	2	1	27	46	76	60	75	107	76	44	18	11	. .	1	. .	5	3
310	1101	265	3248	5375	10688	9887	9834	13238	9925	5347	2241	1297	99	183	25	2058	1640

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*19th child.

TABLE No. XI.

PLURALITY BIRTHS.

Number of Plurality Births, Males and Females, Nationality and Color of Mother, for the Year Ending September 30, 1885.

COUNTIES.	Whole No. of Births.	Sex.		Nationality of Mother.			Color of Mother.	
		Male.	Fem.	Am.	For.	N. R.	Wh't	Bl'k.
Adams	3	4	2	3	...	...	3	...
Allen	7	9	5	6	1	...	7	...
Bartholomew	6	6	6	6	...	...	6	...
Benton	2	2	2	2	...	...	2	...
Blackford	...	...	...	...	...	...	...	...
Boone	8	10	6	8	...	...	8	...
Brown	2	3	1	2	...	...	2	...
Carroll	10	6	14	10	...	...	10	...
Cass	5	8	2	5	...	...	5	...
Clark	4	5	3	4	...	...	4	...
Clay	9	13	5	6	2	1	9	...
Clinton	3	3	3	3	...	...	3	...
Crawford	3	4	2	2	...	1	3	...
*Daviess	7	9	6	7	...	...	7	...
Dearborn	1	...	2	1	...	...	1	...
Decatur	3	2	4	3	...	...	3	...
Dekalb	2	1	3	2	...	...	2	...
Delaware	7	10	4	7	...	...	7	...
Dubois	8	8	8	8	...	...	8	...
Elkhart	2	1	3	2	...	...	2	...
Fayette	2	1	3	2	...	...	2	...
*Floyd	3	4	3	3	...	...	3	...
Fountain	8	10	6	8	...	...	8	...
Franklin	3	3	3	3	...	...	3	...
*Fulton	2	3	2	2	...	...	2	...
Gibson	6	4	8	6	...	...	6	...
Grant	5	5	5	5	...	...	5	...
Greene	6	9	3	6	...	...	6	...
Hamilton	12	13	11	12	...	...	12	...
Hancock	...	...	...	...	...	...	...	...
Harrison	3	3	3	3	...	...	3	...
*Hendricks	9	7	12	9	...	...	9	...
Henry	1	2	...	1	...	...	1	...
Howard	10	10	10	10	...	...	10	...
Huntington	8	7	9	8	...	...	8	...
Jackson	5	9	1	4	1	...	4	1
Jasper	2	2	2	2	...	...	2	...
Jay	6	9	3	6	...	...	6	...
Jefferson	2	2	2	2	...	...	2	...
Jennings	5	8	2	5	...	...	4	1

TABLE No. XI—Continued.

COUNTIES.	Whole No. of Births.	Sex.		Nationality of Mother.			Color of Mother.	
		Male.	Fem.	Am.	For.	N. R.	Wh't	Bl'k.
†Johnson	7	7	9	7	...	...	7	...
Knox	1	2	...	...	1	...	1	...
Kosciusko	1	1	1	1	...	...	1	...
Lagrange	1	...	2	1	...	...	1	...
Lake	3	3	3	3	...	...	3	...
Laporte	6	6	6	6	...	...	6	...
Lawrence	5	2	8	5	...	...	5	...
Madison	12	17	7	12	...	...	12	...
*Marion	68	76	61	60	7	1	60	8
Marshall	2	...	4	2	...	...	2	...
Martin	5	5	5	4	1	...	5	...
Miami	9	14	4	9	...	...	9	...
Monroe	5	6	4	5	...	...	4	1
Montgomery	7	4	10	5	2	...	7	...
Morgan	2	2	2	2	...	...	2	...
Newton	1	1	1	...	1	...	1	...
Noble	3	4	2	2	1	...	3	...
Ohio	...	...	...	...	...	...	...	...
Orange	4	5	3	4	...	...	4	...
Owen	6	6	6	6	...	...	6	...
Parke	9	11	7	9	...	...	9	...
Perry	5	6	4	2	1	2	5	...
Pike	4	2	6	3	1	...	4	...
Porter	3	4	2	2	1	...	3	...
*Posey	9	11	8	6	3	...	9	...
Pulaski	...	...	...	...	...	...	...	...
Putnam	5	7	3	4	1	...	5	...
Randolph	3	4	2	3	...	...	3	...
Ripley	...	...	...	...	...	...	...	...
Rush	3	5	1	3	...	...	3	...
Scott	...	...	...	...	...	...	...	...
Shelby	6	9	3	6	...	...	6	...
*Spencer	11	11	12	11	...	...	11	...
Starke	...	...	...	...	...	...	...	...
Steuben	...	...	...	...	...	...	...	...
St. Joseph	9	6	12	8	...	1	9	...
Sullivan	4	3	5	4	...	...	4	...
Switzerland	3	2	4	3	...	...	3	...
Tippecanoe	2	3	1	2	...	...	2	...
Tipton	1	2	...	1	...	...	1	...
Union	1	1	1	1	...	...	1	...
Vanderburgh	12	16	8	10	2	...	12	...
Vermillion	3	3	3	2	...	1	3	...
*Vigo	19	17	23	14	5	...	19	...
Wabash	2	4	...	2	...	...	2	...
Warren	6	6	6	6	...	...	6	...
Warrick	...	...	...	...	...	...	...	...
Washington	1	1	1	1	...	...	1	...
Wayne	15	15	15	13	2	...	15	...
Wells	1	1	1	1	...	...	1	...
White	4	5	3	4	...	...	4	...
Whitley	2	1	3	1	1	...	2	...
Total	481	532	441	440	34	7	470	11

* Triplets.

† Four children.

TABLE No. XII.

STILL-BIRTHS.

Number of Still-Births, Males and Females, Nationality and Color of Mother, for the Year Ending September 30, 1885.

COUNTIES.	Whole No.	Sex.		Nationality of Mother.			Color of Mother.	
		Male.	Fem.	Am.	For'n	N. R.	Wh't	Bl'k.
Adams	4	3	1	4	...	...	4	...
Allen	36	23	13	30	6	...	36	...
Bartholomew	14	10	4	12	...	2	13	1
Benton	5	2	3	4	...	1	5	...
Blackford	...	...	...	...	...	...	...	...
Boone	18	11	7	18	...	...	18	...
Brown	1	...	1	1	...	...	1	...
Carroll	5	4	1	4	1	...	5	...
*Cass	5	6	...	3	1	1	5	...
Clark	15	7	8	15	...	...	13	2
Clay	16	8	8	15	1	...	16	...
Clinton	3	3	...	3	...	...	3	...
Crawford	7	4	3	5	...	2	7	...
Daviess	18	9	9	18	...	...	18	...
Dearborn	13	8	5	8	4	1	13	...
Decatur	7	2	5	6	...	1	7	...
Dekalb	9	4	5	8	...	1	8	1
Delaware	22	16	6	22	...	...	22	...
Dubois	9	4	5	9	...	...	9	...
Elkhart	7	3	4	5	...	2	7	...
Fayette	7	2	5	6	...	1	7	...
Floyd	11	8	3	11	...	...	11	...
*Fountain	10	5	6	7	1	2	10	...
Franklin	...	...	...	...	...	...	...	...
Fulton	4	1	3	4	...	...	4	...
Gibson	16	10	6	16	...	...	15	1
Grant	5	3	2	5	...	...	5	...
Greene	6	5	1	6	...	...	6	...
Hamilton	23	13	10	21	...	2	21	2
Hancock	20	14	6	19	...	1	20	...
Harrison	27	18	9	26	...	1	27	...
Hendricks	8	3	5	8	...	...	8	...
Henry	12	6	6	12	...	...	10	2
Howard	8	7	1	8	...	...	8	...
Huntington	...	...	...	...	...	...	...	...
Jackson	11	7	4	11	...	...	11	...
*Jasper	6	4	3	6	...	...	6	...
Jay	27	15	12	27	...	...	27	...
Jefferson	...	...	...	...	...	...	...	...
*Jennings	5	3	3	5	...	...	5	...

TABLE No. XII—Continued.

COUNTIES.	Whole No.	SEX.		NATIONALITY OF MOTHER.			COLOR OF MOTHER.	
		Male.	Fem.	Am.	For'n	N. R.	Wh't	Bl'k.
Johnson	9	6	3	9	...	...	8	1
Knox	3	1	2	3	...	...	3	...
Kosciusko	16	10	6	10	...	6	10	6
Lagrange	7	3	4	7	...	...	7	...
Lake	2	...	2	2	...	...	2	...
Laporte	18	10	8	15	2	1	17	1
Lawrence	6	4	2	6	...	...	5	1
Madison	27	16	11	27	...	...	27	...
Marion	116	63	53	109	6	1	97	19
Marshall	1	1	...	...	1	...	1	...
Martin	11	7	4	11	...	...	11	...
Miami	10	6	4	10	...	...	10	...
Monroe	9	8	1	9	...	...	9	...
Montgomery	7	6	1	6	1	...	7	...
Morgan	3	2	1	3	...	...	3	...
Newton	6	4	2	5	1	...	6	...
Noble	4	4	...	4	...	...	4	...
Ohio	...	...	...	...	...	...	...	...
Orange	8	5	3	8	...	...	8	...
Owen	5	5	...	3	...	2	5	...
Parke	4	4	...	4	...	...	4	...
Perry	3	3	...	3	...	...	3	...
Pike	3	1	2	3	...	...	3	...
Porter	6	5	1	4	1	1	6	...
Posey	16	13	3	16	...	...	16	...
Pulaski	1	...	1	...	1	...	1	...
Putnam	11	6	5	11	...	...	11	...
Randolph	13	8	5	10	3	...	13	...
Ripley	...	...	...	...	...	...	...	...
Rush	8	4	4	8	...	...	8	...
Scott	...	...	...	...	...	...	...	...
Shelby	8	5	3	8	...	...	8	...
Spencer	15	9	6	14	1	...	15	...
Starke	1	1	...	1	...	...	1	...
Steuben	1	1	...	1	...	...	1	...
St. Joseph	16	11	5	12	3	1	16	...
Sullivan	25	14	11	19	3	3	25	...
Switzerland	3	2	1	3	...	...	3	...
Tippecanoe	7	4	3	3	3	1	7	...
Tipton	4	2	2	3	1	...	4	...
Union	1	...	1	1	...	...	1	...
Vanderburgh	54	26	28	44	10	...	47	7
Vermillion	4	1	3	4	...	...	4	...
†Vigo	38	22	18	34	4	...	35	3
Wabash	11	6	5	11	...	...	11	...
Warren	2	...	2	2	...	...	2	...
Warrick	7	4	3	6	1	...	7	...
Washington	2	1	1	2	...	...	2	...
Wayne	40	21	19	32	6	2	37	3
Wells	6	4	2	6	...	...	6	...
White	8	6	2	6	1	1	8	...
*Whitley	11	5	7	10	1	...	11	...
Total	1017	601	423	916	64	37	967	50

†Triplets.
*Twins.

TABLE No. XIII.

ILLEGITIMATE BIRTHS.

Number of Illegitimate Births, Males and Females, Nationality and Color of Mother, for the Year ending September 30, 1885.

COUNTIES.	Whole No. of births.	SEX.		NATIONALITY OF MOTHER.			COLOR OF MOTHER.	
		Male.	Fem.	Am.	For'n	N. R.	Wh't	Bl'k.
Adams	2	1	1	2	...	...	2	...
Allen	18	10	8	18	...	...	18	...
Bartholomew	11	8	3	10	1	...	10	1
Benton	4	2	2	3	1	...	4	...
Blackford	...	...	...	...	...	...	...	...
Boone	9	5	4	8	...	1	9	...
Brown	6	...	6	6	...	...	6	...
Carroll	6	4	2	6	...	...	6	...
Cass	...	...	...	...	...	...	...	...
Clark	6	3	3	6	...	...	5	1
*Clay	5	2	4	5	...	...	5	...
Clinton	3	1	2	3	...	...	3	...
Crawford	16	7	9	10	...	6	16	...
Daviess	12	8	4	11	1	...	12	...
Dearborn	7	4	3	7	...	...	7	...
Decatur	2	...	2	2	...	...	2	...
Dekalb	1	...	1	1	...	...	1	...
Delaware	10	5	5	10	...	...	10	...
Dubois	4	2	2	4	...	...	4	...
Elkhart	8	4	4	8	...	...	8	...
Fayette	2	1	1	2	...	...	1	1
Floyd	6	2	4	5	1	...	5	1
Fountain	5	2	3	5	...	...	5	...
Franklin	...	...	...	...	...	...	...	...
Fulton	3	2	1	3	...	...	3	...
Gibson	10	4	6	10	...	...	10	...
Grant	8	7	1	8	...	...	8	...
Greene	10	7	3	10	...	...	10	...
Hamilton	13	6	7	10	...	3	8	5
Hancock	7	6	1	7	...	...	7	...
Harrison	7	4	3	6	1	...	6	1
Hendricks	4	3	1	4	...	...	4	...
Henry	8	5	3	5	3	...	7	1
Howard	2	...	2	2	...	...	2	...
Huntington	5	4	1	5	...	...	5	...
Jackson	12	7	5	10	...	2	11	1
Jasper	4	...	4	3	1	...	4	...
Jay	14	6	8	13	...	1	14	...
Jefferson	1	1	...	...	...	1	1	...
Jennings	4	2	2	4	...	...	4	...

TABLE No. XIII—Continued.

COUNTIES.	Whole No. of births.	Sex.		Nationality of Mother.			Color of Mother.	
		Male.	Fem.	Am.	For'n	N. R.	Wh't	Bl'k.
Johnson	4	2	2	4	...	...	4	...
Knox	7	5	2	7	...	...	7	...
Kosciusko	18	5	13	17	...	1	18	...
Lagrange	...	...	...	...	...	...	...	...
Lake	1	...	1	1	...	...	1	...
Laporte	5	2	3	5	...	...	4	1
Lawrence	7	6	1	6	...	1	7	...
Madison	19	12	7	19	...	...	19	...
Marion	69	44	25	67	2	...	60	9
Marshall	1	1	...	...	1	...	1	...
Martin	5	3	2	5	...	...	5	...
Miami	9	6	3	9	...	...	9	...
Monroe	12	10	2	12	...	...	11	1
Montgomery	4	1	3	4	...	...	4	...
Morgan	...	...	...	...	...	...	...	...
Newton	...	...	...	...	...	...	...	...
Noble	1	...	1	...	...	1	1	...
Ohio	5	4	1	5	...	...	5	...
Orange	5	3	2	5	...	...	5	...
Owen	6	4	2	6	...	...	6	...
Parke	...	...	...	...	...	...	...	...
Perry	...	...	...	...	...	...	...	...
Pike	5	2	3	5	...	...	5	...
Porter	3	2	1	2	1	...	3	...
Posey	4	3	1	4	...	...	4	...
Pulaski	1	1	...	1	...	...	1	...
Putnam	7	3	4	7	...	...	7	...
Randolph	17	6	11	17	...	...	17	...
Ripley	...	...	...	...	...	...	...	...
Rush	2	1	1	2	...	...	2	...
Scott	1	1	...	1	...	...	1	...
Shelby	3	2	1	3	...	...	3	...
Spencer	13	6	7	13	...	...	7	6
Starke	...	...	...	...	...	...	...	...
Steuben	...	...	...	...	...	...	...	...
St. Joseph	7	3	4	5	2	...	7	...
Sullivan	13	6	7	8	...	5	13	...
Switzerland	2	...	2	2	...	...	2	...
Tippecanoe	8	5	3	6	...	2	8	...
Tipton	5	2	3	5	...	...	5	...
Union	...	...	...	...	...	...	...	...
Vanderburgh	34	18	16	32	2	...	28	6
Vermillion	1	...	1	1	...	...	1	...
*Vigo	22	12	11	21	1	...	22	...
Wabash	3	2	1	3	...	...	3	...
Warren	5	3	2	5	...	...	5	...
Warrick	6	4	2	5	1	...	4	2
Washington	2	...	2	2	...	...	2	...
Wayne	27	9	18	23	2	2	22	5
Wells	...	...	...	...	...	...	...	...
White	8	6	2	6	2	...	8	...
Whitley	1	1	...	1	...	...	1	...
Total	633	341	294	584	23	26	591	42

*Twins.

ZYMOTIC DISEASES CONSIDERED WITH REFERENCE TO THEIR CAUSE, EXTENT AND PREVENTION.

BY R. FRENCH STONE, M. D., INDIANAPOLIS.

Zymotic disease has been defined by our leading medical authorities as any epidemic, endemic, contagious or sporadic affection which is produced by some morbific principle acting on the system like a ferment. It is now generally conceded that the peculiar and mysterious process of zymosis acting presumably upon the blood causes profound changes in the system, and produces widespread constitutional affections among the human race throughout the world. We have two theories in regard to the initial factors of the zymotic process. The one which seems to be the most generally believed in is known as the *cryptogamic* or *bacterian* method of development. But recent speculation and the alleged discoveries as to the origin of certain *specific diseases* in certain minute *vegetable* organisms is still unproved, and has no basis except the barren and absurd analogy that such diseases may be propagated like plants or animals. It is a theory which assumes that disease is an *entity*, and no matter how powerful are the predisposing causes of disease, or how susceptible individuals are to the invasion of disease, it can not be established until a certain vegetable organism has gained entrance from *without* the system, and that the character of disease is then determined by the form of the vegetable parasite which may then be discovered. In this connection it is fair to state that while the theory of the mycrophytic origin of specific diseases has met with a widespread popularity, it promises to be of brief duration. It has failed to meet the indorsement of many of the leading medical men throughout the world, and in fact an earnest skepticism prevails among many prominent medical scientists as to the real significance of micrococci, bacilli, etc. Their existence in the blood at the outset of disease is denied. Their development a few hours after death is conceded, but their appearance is considered as the result of decomposition, showing nothing as regards the specificity of constitutional infectious disease. The bacillus tuberculosis of Koch, to which so much importance has recently been attached, *is fast losing its diagnostic and prognostic significance*, as it has been found in the non-tuberculous, affected with bronchitis, pneumonia, etc., and shows nothing as regards the specificity of disease, and thus far has led to only visionary and impracticable measures of sanitation or treatment. The discovery of the part played by certain vegetable parasitic organisms in the etiology of certain *local* diseases is fully recognized; but the analagous explanation of the origin, development and transmission of *constitutional* infectious disease is to be rejected. The etiological influence of such agencies in the production of the latter class of maladies must soon or late be looked upon as a fallacy and a delusion, and which, by ignoring and supplanting the known factors of disease and the application of appropriate hygienic or curative measures of treatment, as deplorably misleading and impracticable. Viewing the causation of zymotic or constitutional infectious diseases from the standpoint of physiological perturbation, the writer believes that the only "germs" that should be recognized as an etiological factor in this class of maladies are those which are natural to and evolved from the animal body itself while subject to the influence of abnormal conditions, and that all others found (such as the various forms of vegetable organisms) are the effect and not the cause of disease. The reader will observe that while both the theories enumerated may be called "germ theories," that they are widely different in many respects. The first embodies the idea that the true disease germs are entirely foreign to the body, and received into it from without, in fact parasitic vegetable organisms. The second attempts to define the origin, development, progress and transmission of zymotic disease by means of living germinal cells, normal to and evolved from the animal body itself, and which, so far as facts of growth, movement and proliferation are concerned, correspond in power and properties with the lymphoid cells, or white corpuscles of the blood, and which may, in fact, be considered as identical with these bodies. The published microscopical demonstrations and investigations of Beale, Sanderson, Bastian, Richardson and others, seem to render this the most reasonable and conclusive of all the so-called "germ" theories hitherto promulgated for the elucidation of the etiology and pathogenesis of this class of maladies.

INFLUENCE OF "WASTE" PRODUCTS IN ZYMOTIC DISEASE.

It is known that during the visitation of the severest epidemics of infectious disease, that the number attacked is, in reality, small in comparison to the entire population, and it is unquestionable that a large proportion of those who are as fully exposed as those attacked by the disease do not become the subjects of it. It is evident that there must be some "predisposing condition" which determines zymotic action in the individuals who manifest its effects. This fact has been recognized by all who have at various times scientifically studied the etiology of epidemics, and it has been universally noted that unwholesome food, bad water and foul air have exerted a singular potency in favoring *zymosis* on individuals and communities. But the most common condition which all these agencies tend to produce, which experience has shown to be especially favorable to the development of zymotic disease, is the presence in the blood of the individual attacked of an *excess* of those decomposing, effete matters with which the circulating current is normally charged to a limited amount during their passage from the parts of the body in which they are poured into it to the excretory organs by which they are eliminated and cast forth. If the amount of these matters be limited to that which is being continually generated in the ordinary waste of the body, and if the great emunctories (the lungs, the liver, the intestinal glandulae, the kidneys and the skin), all do their proper work, the products of that "waste" are drawn off from the blood current as fast as they are poured into it, so that the nutrient fluid is kept pure. But if, on the contrary, such decomposing matters be either abnormally introduced from without, or be generated in abnormal amount within the body, or if, on the other hand, the normal process of elimination be in any way obstructed; or if, still more, an abnormal excess of the one process concurs with deficient activity of the other, a rapid accumulation of these matters takes place in the blood, and then by providing the *pabulum*—nitrogenous matter in a decomposing or readily decomposable state—supplies the very condition, both in cause and effect, necessary to complete the cycle of morbific activity. Of the effectiveness of the *introduction* of putrescent organic matter, either in food, water or air, the cholera epidemics of former years afford the most ample proof. "Of even more marked potency of the *excessive generation of effete material within the body*, we have a typical example in the extraordinary proclivity of *puerperal female* to suffer from the action of any septic poison to which she may be exposed." Nothing can be plainer to the physiologist (says the late Dr. Carpenter, of London) than that the return of the uterus, after parturition to its non-pregnant condition, involves a rapid "waste" of its muscular substance, the products of which will be poured into the blood current far more rapidly than can be eliminated, this state being continued until the process is completed. The like condition exists in subjects of *severe injuries* and *surgical operations*, and not only do these exhibit a special proclivity to the action of specific poisons like scarlatina, but they show a peculiar liability to suffer from the ordinary septic poisons which have no effect upon the healthy carriers of them, erysipelas and adynamic "surgical fever" being then communicable. *Excessive exertion*, again, whether bodily or mental (such excess being marked by the *sense of fatigue*), has always ranked among the most potent predisposing causes of zymotic disease, and its action is clearly traceable to the same source, the abnormally rapid "waste" of the tissues, whereby the blood current becomes unduly charged with the products of their disintegration. It is within the experience of every one that the *sense of fatigue* bears no constant proportion to the amount of exertion put forth, and that an unusually severe and prolonged strain may be sustained without its induction, when the excretory apparatus is stimulated to increased activity; and, on the contrary, any obstruction to the eliminating processes (as bad ventilation of the sleeping apartment), preventing the removal of "waste products," develops this sensation to a marked degree. There is strong reason, therefore, for regarding this feeling as indicative of the degree in which the *blood is charged with the products of nervo-muscular "waste."* Ample evidence is afforded by army experience of the special liability of soldiers to zymotic diseases when on long and fatiguing marches; and this especially in hot climates, where the activity of the respiratory process, being reduced by the high external temperature, the products of the "waste" tend to accumulate in the blood current.

Of the tendency to zymotic diseases, induced by the accumulation of effete matter consequent upon *obstructed elimination*, we have a marked example in that which results from *overcrowding*. "The effect of defective air supply is not only to reduce the quantity of carbonic acid got rid of by expiration, but also (which is probably of greater importance in relation to zymotic disease), to diminish the *normal oxidation* of those nitrogenous effete matters of which (when thus metamorphosed) it is the special function of the kidneys and the skin to eliminate." The accumulation of these waste products within the body speedily makes itself manifest in the offensiveness of the *halitus* of respiration (the condensation of the breath showing the presence of fetid matter), and the same condition existing in a marked degree with reference to the cutaneous, renal and intestinal excretions; and then, although there may be no introduction of decomposing matter into the body, or specially rapid internal production of it, the blood-current becomes as effectually charged with the *pabulum* of the *zymotic poison* as if this had been directly injected into it.

There is one factor in zymosis which we fear is too much overlooked, even by the medical profession. We refer to the strong predisposition to zymotic diseases induced by *intemperance*. For the *habitual presence of alcohol*, a readily oxidizable hydrocarbon in the blood current, undoubtedly diminishes the oxidation of the waste products of the system, and thus occasions their accumulation as effectually as from overcrowding; and this result will occur sooner in a hot than in a cold atmosphere, on account of the reduced activity of the respiratory process in the former. Where, again, the rate of "waste" is abnormally increased, as during protracted physical labor, the evil influence of alcoholic liquors is still more strongly manifested, and this will be again aggravated by overcrowding in ill ventilated apartments. The connection between *famine* and *pestilence* is another argument in favor of the fact that a state of general blood contamination is produced by the accumulation of the non-eliminated products of tissue metamorphosis. When people are suffering from starvation, the vital powers are too *depressed* to carry on the normal excretory functions. The fetid excretions from the skin, the rapid supervention of general putresence after death, and its manifestations even previously, and the frequent termination of life by colliquative diarrhea, all evidence the peculiar fitness of the body, so conditioned for the development of a zymotic disease, or in augmenting the severity of the attack, as well as in lowering the healthy vigor of the body generally, by which individuals are rendered more easily affected by all those diseases to which they may be *constitutionally* liable.

Where any form of malnutrition exists, whether resulting from imperfect performance of the primary digestive processes, producing ill-made blood, or from imperfect conversion of blood into tissue, there must be premature degeneration and augmented waste, and the rate of this augmentation must tend to increase, if special *attention* be not given to the *eliminating* processes. The fundamental importance of pure fresh air (as cool as can be borne) to the scrofulous subject, and the remarkable cures sometimes effected in individuals in whose lungs tubercular deposits have already commenced, by the hazardous discipline of a hardy outdoor life can be clearly explained upon sound physiological reasoning. "When any serious malady has once established itself the degeneration of tissue, as shown by the rapid wasting of the body, takes place with augmented rapidity, and the necessity for the removal of its products is proportionately urgent. And this is no less important when the progress of the disease is stayed, for the purification of the blood from the contamination it has received is absolutely essential to the establishment of those recuperative processes on which the final issue depends. Of the due elimination of the waste products their *oxidation* is the first and most fundamentally important act, and of the direful consequences of past ignorance and neglect of this principle evinced on a large scale in the overcrowding and bad ventilation of the tenement buildings, hospitals, poor houses and prisons, their records and sanitary investigation too surely demonstrate." And even now our supervision is far from perfect in this particular, and we may safely affirm that not only the public but the medical profession have still much to learn as to the importance of pure air, and of wholesome food and drink, for the *prevention* as well as the cure of disease. On careful study of these circumstances we must admit that we are thus furnished with a scientific *rationale* for all that experience has taught as to the conditions for the development and spread of zymotic disease, which, by giving greater definiteness and consistency to medical doctrine, will afford a surer and more positive basis for preventive hygiene, both public and individual.

THE SPECIFIC CAUSES OF DISEASE.

By specific causes are meant those which not only engender distinct diseases, but which are supposed to be the *only* causes of the maladies which follow their application respectively. But some affections, which belong to the zymotic class of diseases, which are ordinarily supposed to arise from a particular cause and from that alone, do in exceptional cases proceed from another cause. Thus several diseases, whose rule of propagation is from individual to individual, in exceptional cases appear to be spontaneously generated, and still more, upon the other hand, those which seem to be of atmospheric origin are at times undoubtedly disseminated by contagion. Experience and observation teaches that many diseases of this class are autogenetic and in no sense derived from an antecedent disease of the same kind. This view is especially applicable in regard to such an affection as erysipelas, which, although certainly contagious, is also on very good grounds judged to be generable, especially during certain states of lowered health, induced by renal disease and some other visceral affections. Though not so certainly known, it is by many deemed probable that a similar conclusion may be held in regard to more generally contagious affections, such as diphtheria, typhoid and typhus fever, scarlatina and cholera, which, though certainly contagious, may also be autogenetic, or developed from bad hygienic environments. Among zymotic diseases we might still further mention several others, which, although their ordinary or normal mode of spreading is by contagion, yet, beyond reasonable doubt, do sometimes arise spontaneously, and, notwithstanding the arbitrary assertions of the followers of Koch and Pasteur, this is probably the case with yellow fever, small-pox, gonorrhea and syphilis, and unquestionably so in regard to hydrophobia and glanders, the latter diseases in fact being only of *spontaneous origin* in the lower animals, from which they are communicated to man.

The so-called "specific" cause of disease has ever been one of the most mysterious questions that the medical mind has attempted to explain. It is true that the advocates of the "bacterian" theory of diseases claim that certain scientists and microscopists, laboring and investigating outside the domain of medicine, have demonstrated the specific cause of three diseases, splenic and relapsing fever and tuberculosis, and while it is also true that two-thirds of the field of recent medical literature has been occupied in promulgating this visionary hypothesis of pseudo-medical men, and while notwithstanding the attempt is now being made to establish and endow chairs or professorships in certain medical schools to further the interest of this novel doctrine, yet it should be said to the credit of the great body of our profession that it is not yet disposed to receive as admitted fact that which is as yet but simple conjecture. It is not yet disposed to cast aside all that long experience and observation has taught in regard to the many potent etiological factors in the development of zymotic disease, whether relating to those of a general predisposing character, such as seasons, climate, locality or the temperature, or hygrometric condition of the atmosphere, or the effluvia which it holds in suspension, or those special predisposing causes relating to the temperament, constitution, occupation and habits of life, or hereditary influences to which the individual may be subjected, or those acquired predisposing causes having reference to food and drink, and those due to defective excretion, already enumerated, and proclaim to the world that all these influences are to be disregarded as inoperative, and that we have nothing to fear from this class of maladies so long as the system is not invaded by those low, self-multiplying vegetable organisms sometimes found in the depraved excretions of those subject to this class of diseases. And its skepticism has been still further strengthened by the fact that such organisms have been found where no disease existed, and in some of the most infectious maladies their presence have not been demonstrated. And admitting the fact, says Bastian, that they have often or generally been seen in the morbid products and tissures of persons with zymotic disease, this would not by itself be a proof or nearly a proof that bacteria are causative of the morbid change, for obviously they might be mere attendants on the necrosis and decomposition of bodily material availing themselves of the process, just as certain insects would, to feed and multiply; and, as a matter of fact, where such organisms have been seen in morbid material, no direct proof can be given that the meaning of their presence is more than this.

THE NATURE OF CONTAGION.

It may be affirmed that we know nothing yet as to the specific poison, if we may so call it, which produces scarlatina, yellow fever, or cholera. The chemist can not detect in the atmosphere the causes of those infectious diseases which spread only through this medium, or chiefly in this way, nor can he with certainty detect any peculiar substance in the blood of the most pestilential malady other than the proliferation of its normal cell elements, or that due from the contamination of defective excretions. Neither by the microscope nor by the minutest chemical analysis, can we distinguish the pus globule of small-pox or of syphilis from the most laudable pus of the surgeon. Nothing distinctive has yet been seen in the lymph of fresh vaccine fluid, nor has the most delicate tests as yet shown anything especially abnormal in the saliva of a rabid animal, by which specific diseases of this class are communicated so certainly and positively by direct contact. The *materies morbi* of these diseases in our present state of knowledge is still an unsettled problem. At all events, in the vast majority of infectious and contagious diseases, the poisons by which they are called into activity are as yet unseen and unknown. Spectroscopic examination of contagious fluids, anatomical alterations and microscopic and chemical study of the blood upon the living and the dead having furnished no notions sufficiently precise to draw any practical deductions, having furnished little or no positive evidence toward elucidating this question, it is not yet possible to say what is the *essential constitution* of "contagious matter," or what is the intimate nature of the transforming power which the particle of such matter exercises on the particles which it infects. Nor are we able, by actual demonstration, to say that contagion is a *material substance.* We know that the ancients, in investigating the nature of *heat*, regarded it at first as a kind of subtle matter which insinuates itself into the substance of bodies, and resides there with greater or less manifestation of its presence; but that heat is now regarded and proved by scientific observers to be not a material substance, but simply a *condition* of matter, a *force*, or a molecular motion, and from the nature of its action *contagion*, like the *force* caloric, appears to us to be a mere *condition* of matter, and not a material substance. And in that most interesting but most difficult and hitherto almost uninvestigated branch of chemical dynamics we are supposed to have our nearest clue to the scientific problems connected with the subject under consideration. Hence, any theory which tends toward a more clear explanation of the *rationale* of these processes becomes a matter of great interest. The theory which we present assumes the identity of the physical and vital forces. The physical forces embrace magnetism, chemical affinity, heat, electricity, and motion. The so-called vital forces are, assimilation, combustion, animal heat, nerve force, and muscular contractility. All scientists now concede the correlation of the physical forces; that they are convertible the one into the other, and that force, like matter in any form, can neither be created nor destroyed, and as presented to us in the universe, they are both indestructible and inseperable, perpetually existing and unchanging in quantity yet ever changing in form. The ultimate nature of force, however, is the greatest mystery of nature, visible only in its effects as revealed to our senses. We can only judge of its presence by the peculiarity of its action and the effects which it produces.

If we accept the teachings of modern science, all matter is the vehicle of change, motion the result of change, and *force* the cause of change. Life, as we understand it, depends upon the presence of a material substance operated upon by force resulting in movement, and the harmonious interaction of these conditions, when applied to the animal body, would not only constitute life, but health—while its derangement would as surely eventuate in disease and death. According to the demonstrations and conclusions of modern investigators of physical science, the "*vis viva*," or life force, is simply the combined influence of this physical force which is constantly changing its form in the so-called vital processes, while its supply is maintained by the food we eat, the fluids we drink, and the air we breathe.

Thus, for example, the nutrient fluid charged with oxygen is placed in an electro-positive; at the same time the tissues are in an electro-negative, or magnetic, condition, by which assimilation (or chemical affinity) is induced; this involves combustion, oxidation and molecular motion. Molecular motion is converted into (animal) heat, and heat is converted into (animal) electricity, or nerve force, and nerve force induces muscular contraction, or mechanical motion, which, in turn, serves to assist and perpetuate the operation of the other forces, in that it maintains the respiratory function, contracts the heart and arteries, propelling the blood to all parts of the system, and thus supply tissue waste, equalize temperature and maintain the secretory and excretory functions of the body. Such are the different manifestations of the so-called *vital forces*, the normal and harmonious operations of which constitute life and health; but when perverted will not only occasion disease and disorganization, but death, either local or general, as the conditions may determine. To illustrate: If the blood from any cause becomes contaminated or deficient in oxygen, the forces governing nutrition, such as assimilation and combustion, will be perverted in their operation, waste material, or *materies morbi*, will be developed, which may eventuate in morbific effects, such as malnutrition and disorganization of tissue of various degrees and varieties, according to the natural or acquired susceptibility of the subject; or the *materies morbi* thus accumulated may remain in a latent condition until equilibration is commenced by increased oxygenation, and then the increased oxidation augments the amount of animal heat within the body, causing fever, which may in its turn induce pathological lesions, which may vary in character with its *intensity*, ten degrees of which mark the difference between life and death. Force can only manifest itself by molecular motion, but it may exist in two general forms, known as potential energy and actual energy. Force stored up in certain conditions of matter, as in the tension of the particles of an explosive compound, as nitro-glycerine, or in a combustible body, such as wood, coal, and food of animals, is called potential energy—that is, power capable of being liberated for the production of effects. But when the nitro-glycerine explodes, the fuel is burned, or the food is oxidized in the animal body, the force they contain is given out in the form of effects produced, and the potential energy becomes actual energy, or in animal bodies living force. Such we hold to be the nature of unoxygenized material in the blood, constituting *materies morbi*, in that it represents potential energy—becoming actual energy, producing morbid effects when subjected to zymotic action.

Force acting upon different forms of material substance will manifest itself in different ways—as chemical affinity, combustion, electricity, heat, etc. Also force in different forms acting upon the same material substance may give rise to a multiplicity of effects, as quantity and local conditions may determine. *But force operating in a certain direction, producing certain results, tends to continue in that direction and in the production of the same results so long as conditions favorable to its action obtain;* thus the molecular motion imparted to a conducting wire from a galvanic battery may continue for thousands of miles; a spark of fire may destroy a city, and so the smallest quantity of zymotic force which may be embodied in a mere trace of serum, derived from the blood in a state of change, and thus conveyed by means of its own elements, may set up the same morbid action in other individuals whenever their blood becomes of a suitable zymotic condition, and sometimes giving rise to our widest spread and most pestelential epidemics. It is the operation of this law that gives us the *rationale* of contagion, and which confirms the opinion that it is a phase of force and not an entity. But we find—as in the physical forces, so in the vital forces; as in the great laboratory of nature, so in the individual organism—that action is met by counter-action, and that force, however manifested, sooner or later tends to equilibration. For this reason galvanic batteries became exhausted, fires must be fed with fuel, and zymosis ceases and disease ends in the infected individual and in communities when the material suitable for its action has been extinguished. Strictly speaking, therefore, contagion is a *morbid influence*, a perturbation of vital functions, and does not imply the existence animated germs any more than that of any other vehicle, vital or otherwise, which may serve to convey zymotic action. The essence of contagion is not a material substance, but a phase of force, imponderable in its nature, as heat, light, or electricity, specific only so far as it naturally tends to operate in the same direction upon the blood of another individual, when it contains certain constituents identical in character with those upon which it has been operating in the blood of the infecting individual. And it appears reasonable that the "specific" or determining causes of infectious disease involve an acquired personal predisposition for their development, an essential condition of which is the accumulation of "waste" products—of azotized or unoxygenized material within the blood due to defective excretion or other causes already mentioned, and if such material be retained in the system a sufficient length of time, or exist in a sufficient quantity, it may itself assume a state of change, or induce a condition of change in the normal cell elements of the blood and thus give rise to an autogenetic origin of disease, which, when of sufficient virulence, may reproduce the disease by *contagion of zymosis* in another individual, provided his blood is in a similar abnormal condition, which is likely to be the case when individuals and communities are alike subjected to the same general and special predisposing causes of disease. And it would seem possible that while the force zymosis generally induces disease identical to that from which it originates, it might yet establish a zymotic action sufficient to engender other diseases, and in case we assume the nature of zymotic force to be common to all of the infectious maladies, still its effects would differ as other factors might determine. Thus the degree of virulence and the types and varieties of infections would then depend upon the present condition of the individual, his powers of constitution, age, susceptibility, weakened condition of certain organs or tissues from previous diseases or tolerance from like causes, as well as the character of the defective excretion, its degree and the impression it has made upon the nervous system and nutritive functions, and also the route or channel by which nature attempts its elimination as influenced by that elective attraction or repulsion which one tissue or part of the body may have in excess over another for *materies morbi* in the blood. And for these reasons it would be possible, with a common contagion or zymotic influence and a common blood contamination, for one individual to be attacked with one form of infectious disease, and *one* another during the prevalence of a special epidemic, and thus not only afford an explanation of the tendencies of certain maladies to diversify in their characters, as well as the frequent prevalence of different infectious diseases at the same time, and in the same locality, but also those of different types to occasionally blend and merge the one into the other, or develop complications in individual cases—facts observed, but not otherwise easily accounted for.

Those who believe in the bacterian origin of infectious disease, tell us that a certain form of these organisms is required to act as the proximate cause of a certain disease, but they have never yet explained why this is the case. The theory which the writer advocates and which has been more fully set forth in a recent publication (Elements of Modern Medicine), attempts to explain the specificity of disease upon physiological grounds. His conclusions are, that as the normal cell elements of the body become poisoned through defective excretion, it necessarily follows that the character of an infectious disease depends upon the variety or nature of that glandular excretion which is most defective; and hence it also follows that when these normal cell elements become poisoned by an excrementitious material which has accumulated in the blood, they are most prone to elimination through those glands whose defective function has produced the blood contamination, and thus explains the glandular involvement of infectious disease, and that zymotic affections are propagated and determined or made "specific" in obedience to the natural law of *elective attraction* which one tissue or part of the body has over another for the normal germinal or tissue-building cells of the blood, on the one hand, and on that *repellent force* exercised by various excretory glands by means of which material unfit to serve the purpose of nutrition is eliminated from the system. Hence it necessarily follows that in any so-called specific disease these embryonic cells for special tissues, now infected by the general toxic condition of the blood from "waste" material becoming unfit for assimilation, may yet remain living, organic germs, capable of *proliferation* or *multiplication*, and thus by their presence and final regressive metamorphosis or elimination, produce, in part at least, those lesions which characterize the particular forms of infectious disease. And should these semi-vitalized, normal germinal cells, subject to this *morbid* or *zymotic* influence or while undergoing this regressive change, be transplanted to another individual, whose blood is also contaminated with excrementitious material favorable for its continuance, similar phenomena and lesions are liable to be developed as were present in the individual from whom these diseased germinal particles have been derived. These morbid cell elements charged with excrementitious material being still under the dominance of the natural laws of elective attraction which apppopriates certain elements to certain tissues or parts of the body, or that normal repellent force peculiar to certain excretory glands, secure their deposition in those localities or ultimate elimination (if the patient survives) through those excretory organs and parts of the body identical with those from which they have been derived. And thus again are stamped upon the disease its "specific" characters.

It is evident that if the above views be correct that the "waste" products constituting the *initial factor of the zymotic process*, not only exerts poisonous influence upon the nutrient elements of the blood, but also upon the nerve centers as well, in consequence of which many diseases of this class are known to manifest a periodicity in their symptoms and their course, which seems to be in obedience to what observation teaches concerning that general law of periodicity which regulates all the vital movements. If we inquire into the causes of these periodical changes, we find reason to believe that they are in part dependent upon cyclical processes inherent in the system, and partly upon periodic agencies acting from without, or that resulting from a combination of the two. With regard to the external agencies it is to be remembered how closely the periodical changes connected with the vital movements are linked to the periodic phenomena observed in nature at large. Thus, digestion and fasting, wakefulness and sleep, correspond with day and night, light and darkness, and its accompanying changes of temperature. It is known that vital activity is at its lowest between the hours of 1 and 3 A. M. After 3

A. M. the activity increases, at first slowly, and then more quickly, until a maximum is reached between the hours of noon and 2 P. M. A progressive decline follows, rapid at first, slower as the evening draws on and falls into night, until the minimum again is reached between 1 and 3 A. M. These influences, of a periodical character in health, not only tend to invite or resist the invasion of disease at such times, but continue to exert their impression in morbid states of the system by intensifying disease at certain times and lessening its effects at others, either as the activity of the vital forces may be greater or their excitability diminished. Most, if not all, paroxysmal attacks of zymotic disease are probably due to the gradual accumulation of contaminating material in the blood from deficient excretion. This, in the so-called malarial affections, within a certain length of time, will begin to exert a toxic influence upon the nerve centers, ordinarily producing rigor, fever and sweating, or culminating in some other eliminative action, and these morbid phenomena will be repeated at certain definite intervals corresponding with the rate of *re-accumulation* of the blood poison, and partly with the state of excitability of the nervous system. Reasoning from this standpoint, it is fair to assume that prophylactic or medicinal agents may act as anti-periodics in one of three ways: (1) by increasing the activity of the excretory functions, as by the use of emetics, cathartics or diaphoretics; (2) by blunting the excitability of the nervous centers, by the use of narcotics given before the expected paroxysm, and (3) by bracing up the nervous system during the intervals of the paroxysms by the use of quinine, arsenic, and other excitant neurotics, until nature, assisted by other means, can have time to eliminate the *materies morbi*, or else to enable the system to become tolerant to the toxic element in the blood, which exerts a causative influence. It is evident, therefore, that the remedies of the first division are the only ones pathogenetic in character, the other being symptomatic, not specifics, not chemical antidotes to malarial infection, but their action is due to a physiological antagonism, valuable in that they act upon the nervous system in an inverse sense to the morbid influence, and thus serve to annul its effects and counteract or prevent its more dangerous consequences.

EXTENT OF ZYMOTIC DISEASE.

The term *zymotic* has been admitted into standard medical nomenclature as conveniently expressive of the elements or factors giving rise to many of the conditions incident to infectious disease, and is, therefore, employed to designate all those diseases which can be communicated from existing foci, or which are capable of being prevented by hygienic or other conditions. As has been stated, this class comprehends those disorders which appear to involve a morbid condition of the blood, and which present, for the most part, but not all of them, the following characters: They run a definite course, are attended by fever, and frequently by eruptions of the skin; are more or less readily communicable from person to person, and possess the singular and important property of generally protecting those who suffer them from a second attack. They are apt to occur epidemically, and some of them manifest a tendency to transmission by inheritance. The latest and most approved nosology includes over twenty of our principal diseases in the zymotic class—such as small-pox, measles, scarlet fever, diphtheria, croup, whooping-cough, the *essential* fevers (including typhus, typhoid, cerebro-spinal, yellow fever, and the different forms of so-called malarial fever), quinsy, erysipelas, puerperal fever, carbuncle, influenza, dysentery, diarrhea, cholera, rheumatism, pyæmia, etc. The reports of the Registrar General of England show that about one-fourth of the whole number of deaths is from zymotic disorders. An examination of the returns of the Surgeon General and of the Marine Hospital Bureau, as well as the health reports from the principal cities in the United States, will establish about the same ratio; and if we include tuberculosis and pneumonia in this class of maladies (and they certainly fill the essential conditions of zymotic disease), we find that the mortality is more than fifty per cent. of that which occurs from all causes.

An examination of the volume devoted to mortality and vital statistics of our last United States census, 1880, shows that our total mortality for the year was 756,893. Of these more than half died from zymotic disorders, as may be set forth in the following table:

ANNUAL DEATHS FROM ZYMOTIC DISEASES IN THE ORDER OF THEIR FATALITY.

Consumption	91,270
Pneumonia	63,053
Diphtheria	38,143
Cholera infantum	24,983
Enteric fever	22,854
Malarial fever	20,231
Croup	17,966
Scarlet fever	16,388
Dysentery	13,427
Enteritis	12,640
Whooping cough	11,064
Bronchitis	10,984
Diarrhœa	10,825
Measles	8,072
Septicæmia	5,828
Scrofula	5,000
Erysipelas	4,275
Rheumatism	3,399
Cerebro-spinal fever	2,898
Cholera morbus	2,116
Venereal diseases	1,217
Small-pox	871
Other diseases of this order	12,474
Total	402,897

There are 1,146 diseases which affect mankind and require the study and attention of the physician, but less than twenty-five of these diseases, all of which are zymotic, are known to cause nearly two-thirds of the total mortality. Every intelligent physician will admit that, by the application of the well-established principles of sanitary science, we have absolute power to either wholly prevent or mitigate every one of these meladies. Let any medical man examine closely the above table, and he can not fail to be amazed at the mortality from avoidable diseases, as compared with those which are non-avoidable. Let us consider these diseases briefly in the order of their fatality.

CONSUMPTION.

Of all the diseases affecting the human race, tuberculosis is the most general in prevalence and fatal in results. It may be developed from hereditary predisposition, but a bad hygienic influence is acknowledged to be a far more potent cause, the chief factors of which are foul air, exposure to cold and wet with insufficient food and clothing, unhealthful avocations, damp soils, syphilis and alcoholism. The influence of soil moisture in the production of consumption is no theory—it is a demonstrated fact. It has been shown by Dr. Bowditch, of Massachusetts, and Dr. Buchanan, of England, that soil moisture and soil pollution are directly causative of this disease, as well as many other zymotic disorders. It is for this reason that New Orleans, with all its climatic advantages, shows a higher death rate from consumption than any other city in America. Statistical observations extending over a number of years have amply proved the beneficial effects of partial or thorough sewerage and drainage in many of the principal towns of England, the reduction of mortality from this malady varying from eleven to forty-nine per cent., according to the thoroughness with which this sanitary measure was carried out.

PNEUMONIA.

This affection produces a higher death rate than any other except the one last mentioned. It deserves a place among zymotic diseases, as it is now recognized as a general and not a local affection. Its cause and its course is closely related to the essential fevers. Like croup, bronchitis, and pleurisy, it is mainly a disease of temperate climates, and its chief cause is exposure to inclement weather and residence in a damp locality. It is known to be more common among the poor and badly fed, and among those whose occupation necessitates an irregular mode of life and great exposure, than among those otherwise better circumstanced. It is also known to affect those who breathe an impure atmosphere and who are constitutionally weak, and those whose general health has been impaired by some temporary bad hygienic influence, rather than the strong and vigorous, favored by proper sanitary environments.

DIPHTHERIA.

This disease ranks third in its degree of fatality. It is eminently contagious, and the importance of strict isolation of those affected can scarcely be overrated. Apart from endemic and epidemic causes affecting its maintenance *in foci*, and its outbursts at particular times and in particular places, there are etiological influences belonging to individuals not to be overlooked, such as poverty and its concomitants, unventilated, filthy lodgings, scanty clothing and imperfect alimentation, which may not only serve to develop but impart a receptivity for the contagion of this disease. A similar receptivity exists in tuberculous persons and in all cachectic subjects. Scarlatina, measles and whooping cough peculiarly predispose to diphtheria. This is especially true of the former disease. Recently delivered women receive easily the diphtheritic poison. During epidemics the influences of the predisposing causes are strikingly exemplified. While the malady can not be regarded as a hereditary disease, yet observation teaches that a special aptitude to receive and develop the poison evidently pertains to certain individuals and families. It is most common between the ages of two and ten. Few persons are attacked after thirty; but there are occasional victims at all ages, from the earliest infancy to old age. According to our last census about 20,000, or more than half the annual deaths from this malady, occur with children under five years of age.

CHOLERA INFANTUM.

This malady follows next in the order of mortality. Over 16,000 annually, or more than two-thirds of all deaths from this affection, occur with infants under one year of age. How shall we account for this amazing and unwarrantable loss of human life, for this vast number of children dead before the first anniversary of their birthday? Shall we say that thousands upon thousands of precious, helpless infant lives are yearly offered as holocausts upon the altar of man's ignorance or carelessness? In considering diarrheal diseases of infants, it must be remembered that the most powerful factor in their production and fatality is that of artificial feeding, and that the mother's breast is the generous, sympathetic fount from which should flow the nourishment for the babe. It has become fashionable in some circles of society for the mother to shrink from and shirk the high and solemn duty of nursing her own infant; a diseased or filthy wet nurse or a half-starved and tuberculous cow, fed on slops or garbage, is inducted into the office of feeding the child, and when it is well nigh dead from inanition, it is fed on farina and the numerons forms of infants' food with which the country is flooded. Where there is no other excuse for this than the dictates of fashion, or a matter of convenience, it is well said to be a species of moral depravity and inhumanity lower than the instinct of the brute, which always tenderly nurse and defend their offspring.

ENTERIC FEVER.

This disease stands fifth in the degree of fatality, the annual death rate being nearly 23,000. It has been very truly said that of all diseases which are attributable to filth, that this may be proclaimed as the very type and quintessence; though sometimes by hidden processes, yet far more frequently in the most glaring way, it apparently has an invariable course in that which of filth is the filthiest, and that most generally its infection runs its course, as with successive inoculation from one individual to another by instrumentality of the molecules of excrement which have been allowed to mingle with air, food and drink. We do not desire to be numbered with those who entertain the opinion, however, that typhoid fever is so "specific" in its nature that it can only be derived from a pre-existing case of the same disease, but believe that it may be developed by fermentation of fæcal matter independently of any specific germ introduced in typhoid evacuations. The outbreak of the malady in villages and in isolated buildings where the causes can not be traced to any previous case of the disease warrant this conclusion. Fortunately, however, for the bacillus theory of Budd or Klebs, or the pythogenic hypothesis of the late Dr. Murchison (that this fever may be developed anew by the decomposition of sewage, and perhaps of other forms of animal filth), the practical issue of both views is the same, namely, that the great preventive measures are the prompt removal of fæcal matters and other forms of animal decomposition, so that neither air nor water may be contaminated by them. But it is also well-known that individual susceptibility to the disease, and certain predisposing causes, are potent factors in its development and dissemination. It is a matter of common observation that some persons never contract typhoid fever, however much exposed, while others take it readily, and it is almost equally clear that certain families are extremely susceptible and liable to have the disease in a severe form, and that a formidable attack is to be apprehended if either of the parents have died of the fever. This affection may occur at any age, but is very rare in advanced life. It is probably more common in infancy than is generally supposed, as it is easily overlooked or confounded with common infantile ailments. The period of life at which the disease is most common is during adolescence and the first decade of adult life. Among the predisposing causes are mental anxiety, depression or shock, overwork, loss of sleep, lack of ventilation or sunlight and debility, however induced.

MALARIAL FEVER.

The annual mortality from diseases of this character is placed in our last census at over 20,000. Dr. Parkes has well said that when a climate is called "unhealthy," it is simply meant that is malarious. The Italian word *malaria* merely stands for *bad air*, and may be employed to express the condition of the atmosphere when there is suspended in it any effluvia or abnormal constituent deleterious to the functions of animal life, whether this be an earth-born poison, generated in soils, the energies of which are not expended in the growth and sustenance of healthy vegetation, or whether the product of animal or vegetable decomposition. But the latter, in connection with the heat or moisture, has long been considered its most usual source. Malaria is, however, generated under conditions apparently widely different from the above. Fevers of this closs have prevailed with destructive malignity in some of the most sterile regions of the earth, and in countries so dry and arid for want of rain as to cause all the rivers and other bodies of water to completely disappear. Neither do such fevers always increase in gravity and frequency as latitude diminishes. Tropical countries are often exempt, while in others of a high latitude they are known to prevail. They are found in Sweden as high as latitude 63°, and also on the shores of the Baltic Sea. In addition to other causes, unwholesome food, unsuitable drinking water, damp residences, the near presence of slops, garbage or defective house drains, bad ventilation, fatigue, exposure to atmospheric vicissitudes, such as the morning dew, the midday sun and the chill at night are most worthy of mention. That low, moist and warm localities are generally noted as malarious, however, is undisputed. The baneful effects of undrained soils in cities has already been cited. The unhealthful influences upon rural populations by residence near overflowed, undrained and swamp lands is also a matter of common observation. Hence we can not wonder that there is still an alarming prevalence of malarial fevers among the people in many portions of the country, making our population sallow, weakly, unhealthful, paralyzed in energy, and killing them by thousands with the preventable disease which is far more destructive to life than the deadly effects of yellow fever and cholera combined. In the etiological influence of undrained lands we not only have a waste of productive energy, health and life, but the reclamation of such lands would add millions of acres of our richest soil to our cultivable area which, under intelligent tillage, would afford sustenance for a population four times as large as what it is at the present time.

CROUP.

The annual mortality from this disease is nearly 18,000. About one-third of this mortality is with children under one year of age, and almost the entire number of deaths occur with those under five years of age. The disease referred to in this connection is intended to designate pseudo-membranous laryngitis, which is considered of a diphtheretic nature. Its most common cause is cold and moist air, mainly during a prevalent epidemic of diphtheria. There are families with what appears to be a general tendency to croupous laryngitis. The disease may return. Even tracheotomy has been performed twice on the same individual. It is *contagious*. In the same family, from a case of true croup, either another case of laryngeal croup may originate, or another form of diphtheria will develop in other members of the household. Male are more frequently affected than female children.

SCARLET FEVER.

The annual deaths from this disease are over 16,000; mostly affecting children from one to ten years of age. Children under one year of age often escape, or have the malady in a mitigated form. The appearance of the disease in certain localities, without known exposure, argues that this disease, like diphtheria, may originate from unsanitary surroundings. In the vast majority of instances, however, it does not appear except as the result of exposure of one individual to another sick of the disease, or from contact with infected lodgings, bedding, clothing, etc. Precaution in this regard, and the observance of suitable hygienic measures, will generally prevent the development or spread of this malady. Epidemics tend to recur every five or six years, as a fresh series of the susceptible arises. They often extend with us in dry seasons and subside after wet ones. A defective hygiene from imperfectly drained dwellings and bad ventilation aggravate the type and intensify the infection of the disease. Infection attaches to the entire period of illness. Greatest at the height of the disease, it may be given off for six weeks, and even longer. Strict isolation during this time is of the utmost importance.

DYSENTERY.

The United States census places the annual mortality from this disease at over 13,000. More than two-thirds of the deaths occur with children under five years of age. This affection is evidently influenced in frequency and gravity by heat, not only of hot countries but by that of the summer and autumn in temperate climates; but it is generally admitted that the malady depends on a certain focus of infection, and that it dies out on the removal of the cause. Diarrhea and dysentery are the most frequent scourges of armies. In the United States Army the disorder prevailed to the extent of 209 per 1,000 of the mean strength for 1883. The causes which produce dysentery are similar, if not identical, with those which develop malarial fever, such as moisture, common to habitations on low grounds, foul air, exposure to rain and wet, too light clothing and the influence of the seasons and conditions of the weather, impure water, unwholesome food, cold and damp nights followed by hot days and rapid changes of temperature. The contagiousness or communicable nature of the malady is an unsettled question, but the complete disinfection or destruction of the alvine evacuations may be regarded as a sanitary mearsure of great importance.

ENTERITIS.

The deaths from this affection are more than 12,000 annually. Children under one year of age suffer over 25 per cent. of the fatality, and with those under five years more than 50 per cent. of the deaths occur. No doubt many of the cases thus reported might have been classed as cholera infantum. In the majority of instances it is due to the same causes that develop this disease, or those which induce dysentery. The disease is much more frequent in the summer, particularly when there is extreme difference between day and night temperature, or when the heat is associated with much moisture. Of exciting causes improper food is by far the most common, especially during the first year of life. Cow's milk alone may at that time be sufficient to induce it, and it is rare for infants of this age to escape an attack.

WHOOPING COUGH.

The fatality in this affection is seen from the census table to be far greater than that usually supposed, more than 11,000 deaths occurring annually from this cause. But of this number nine-tenths of the deaths are under five years, and more than half under one year of age. This malady occurs in epidemics, chiefly prevalent in the spring, extending over a large part of any town or district associated by various means of inter-communication or by common educational establishments, and spreads as long as *young children* who have not had the disease before are brought within its influence. Certain bodily states—the condition of teething, and that left after measles and some other diseases predispose the mucous surfaces to infection. The infection is often received with that of measles, and the characteristic cough of one disease is not recognized till the rash of the other has passed away. Infection persists for six or eight weeks after the disease is declared. Whooping cough prevails so extensively in early childhood that it is rare to find anyone grown up without having been exposed to it. The writer, however, witnessed an epidemic at Key West in 1866 which affected many of the oldest inhabitants. But, as a rule, those who escape infection in childhood mostly escape it altogether. It is one of the three diseases most fatal to young infants, and like the bronchitis of cold weather and the diarrhea of summer, is, as we have proved, most fatal to the youngest. It differs from the two affections named in not being more fatal in very hot or very cold years. Its fatality in England with children stands next to scarlet fever. In the United States its fatality with children under five years of age exceeds that of scarlet fever. It is more fatal with girls than boys. The intensity of the disease is increased by overcrowding, bad ventilation and the confinement of the sick in close apartments. Guarding young children from exposure to the known infectiousness of the malady would doubtless save thousands of lives, the disease being mild and comparatively free from danger in after years.

BRONCHITIS.

We find from the United States censns that nearly 11,000 deaths occur annually from bronchitis. This disease is, no doubt, equally prevalent during the active or middle period of life, but the extremes of life exhibit the greatest fatality, owing mainly to the greater tendency of the inflammation at such periods to extend directly from the bronchioles into the lobules of the lungs, thereby complicating the bronchitis with lobular pneumonia, and, no doubt, in more than half the cases reported under the head of bronchitis the fatal result was caused by pneumonia instead of bronchitis. We find from the above report that more than half the deaths were with children under five years of age, and more than one-fourth after fifty years of age. The chief causes of the malady are exposure to atmospheric temperatures too warm or too cold, or the habitual wearing of too much warm clothing, or that which is insufficient, and especially the unequal adjustment of clothing to different parts of the cutaneous surface. In children especially we often see an abundance of warm clothing over the whole body, while the legs and feet and neck have but a single covering, and sometimes none. Whenever, in order to be fashionable, such children are seen out on cold days with naked legs, from short trousers and defective stockings, it may be safely affirmed that they either have a quack for a physician or a fool for a mother, and possibly both. If the mothers of such children, and others, will persist in sitting by open windows with low-necked dresses, or on going out loaded with warm clothing, while their feet and ankles are protected only by thin shoes and stockings, they will be pretty certain to contract bronchitis; but while this may be only an annoying spell of sickness to them, the same affection may mean death to their children. Besides, exposure to sudden and extreme changes of temperature, or that which is incident to a cold, damp and variable climate, bronchitis is to be classed among zymotic disorders, since it often occurs in an epidemic form without the presence of an obvious exciting cause. It also occurs in connection with certain general fevers, more particularly with typhoid, measels, influenza, and pertussis. It also sometimes, though more rarely, accompanies rheumatism, erysipelas and constitutional syphilis.

DIARRHŒA.

Over 10,000 deaths annually are recorded in the United States census from this affection, but if we include those cases under the name of cholera morbus, cholera infantum, and dysentery we find a yearly death of more than 50,000 persons from this class of diseases, 24,000 of them infants under one year of age. With the latter, as we have said, artificial feeding may be recognized as the principal etiological factor. But sanitarians universally agree that in all filthy districts that those diseases especially predominate which, in respect of their leading symptoms, may be generalized as diarrheal. The mucus membrane of the intestinal canal seems to especially bear the stress of all accidental putridities which enter the blood. Whether they have been breathed, or drank, or eaten, or absorbed from the surface of foul ulcers, or directly injected into the blood vessels by the physiological experimenter, this effect may be looked for. Just as alcoholic stimulents, however administered, will get into the head, so septic ferment, entering the blood by whatever route, is almost certain to find its way thence to the bowels, and there, as an inevitable result, produce diarrhea. Rational therapeutics in such cases do not consist so much in checking the often symptomatic disorder (which may be nature's only safeguard) by restraining measures, as in strict sanitation against all those agencies known to exert a causative influence.

MEASLES.

The annual mortality from this disorder is about eight thousand. Of this number nearly one-half the deaths occur with children under two years of age. After this age the mortality is not greater in proportion to the number of attacks than at other periods of life, and there is some advantage in contracting the disease at a time when careful nursing and individual attention can be secured. Those who escape measles during childhood are very likely to be siezed on taking their part in mixed communities. Contagion is the probable cause of measles wherever it is now met with. In large towns, where sources of infection always exist, epidemics recur about every four years, chiefly among children, as a fresh series of the susceptible become exposed. Extremes of temperature, exposure to wet or dampness, malarial soil, vitiated air or crowded dwellings and defective diet are factors which contribute to its fatality. Measles, in a school or family, is sure to spread, as the catarrhal stage, which is infectious throughout, is generally mistaken for a common cold and no timely separation is attempted. Infection begins before the rash appears. After an attack of the measles isolation for at least thirty days should be required. Infection may cling to articles of clothing or linger in closed rooms even longer than this length of time.

REMAINING ZYMOTIC AFFECTIONS.

Septicæmia causes nearly six thousand deaths annually. This affection originates from the introduction of septic or putrid matter into the blood; a poisoning from absorption of the chemical product of putrefaction. Impure air, especially that which emanates from decomposing animal matter, crowding together a number of persons with suppurating wounds, neglect in removing the discharges and excretions from sick persons, and imperfect drainage and the puerperal condition favor the development of this disorder. It may also follow disease of important excretory organs, as Bright's disease, great nervous depression, wounds, local inflammation and is the gravest danger of many surgical operations. Prophylactic measures are suggested by the consideration of the foregoing causes. Scrupulous cleanliness and the integrity and functional activity of the chief excretory organs should be secured in all cases of operation or injury in order that decomposition of the discharge or the accumulation of effete material in the blood may be guarded against.

Scrofula causes five thousand deaths annually, and over fifty per cent. of this mortality is with children under five years of age. But our census does not tell us of the many thousand children annually born into the world with frail constitutions who live on doomed to blindness, deafness and life-long deformity and misery, due to this malady, for in a vast majority of instances it is a disease hereditarily acquired. Its causes mainly lie beyond the conception of the infant, and preventive measures have reference to the marriage of unhealthful individuals, which ought to be controlled in every civilized country by legislative enactment.

Erysipelas causes annually over 4,000 deaths, more than one-third of this fatality also occuring amongst children under five years of age. This affection is undoubtedly infectious and inoculable, as hospital experience has amply demonstrated, but the development of the disease depends, to a great extent, upon the patient and his surroundings. Constitutional predisposition is hereditary, and is increased by previous attacks. Disease of some important viscus, especially liver and kidneys, and the presence of a wound tend to develop the malady. It is said to be most common in women, especially at the menstrual period. Intemperance and want of proper food are great predisposing causes. It is said to be most common in spring and autumn. Of other predisposing causes to be observed and guarded against, overcrowding in hospitals and prisons, lack of ventilation and cleanliness, bad food and impure water should be mentioned as of most importance. Meteorological conditions, as east winds, low temperature, excessive moisture, cold and heat, with attendant perturbation of physiological function may be considered as a cause of its epidemic prevalence, and the type of the disease varies in different outbreaks.

Rheumatism is the cause of over 3,000 deaths annually, the fatality being due, no doubt, to hyperpyrexia, affection of the meninges of the brain, but most generally to complicating heart disease. This disease, like pneumonia and acute bronchitis, belongs to temperate rather than cold climates. It is met with in tropical countries, such as the East Indias and Egypt, but is unknown in the polar regions. Of the predisposing causes, more than one-fourth of the cases can be traced to inheritance. Previous attacks increase its liability to return. It is not uncommon either in children or in persons past middle life. The great majority of first attacks occur, howevor, under thirty years of age, and the larger proportion between sixteen and twenty-five. Laborious outdoor occupations, in which persons are exposed to cold and wet, poverty, and the many evils associated with these, contribute in furnishing the largest percentage of cases. It is not uncommon in warm weather on account of frequency of chills from overheating. It may suddenly make its appearance after a sprain, or other injury to a joint, which may also determine the distribution of the disease in articulations. An attack of acute rheumatism is occasionally referred to derangement of digestion, and the function of the liver, especially in subjects who have previously suffered. Indulgence in abundant rich or indigestible food will certainly determine a relapse in persons convalescing from the disease, and may possibly induce an attack in the predisposed. Depressing bodily or mental influences, and, possibly, simple mental despondency, may act in this way in different instances.

Cerebro-Spinal Fever is the cause of nearly 3,000 deaths annually. Of this number over 50 per cent. occur with children under five years of age.

Its development is favored by over-crowding residence in damp localities, foul air and unwholesome food. It is epidemic, but not contagious.

Cholera Morbus causes about 2,000 deaths annually; over 25 per cent. of this mortality is reported among children under five years of age. This malady prevails most extensively in July and August, when the variation of temperature between day and night is great. Exhaustion of the nervous system by heat favors its development as well as mental anxiety and overwork. Unwholesome food, impure water and offensive exhalations from filthy localities are among its principal exciting causes.

Venereal Diseases are reported as causing only about 1,200 deaths annually, but evidently owing to an unwillingness upon the part of individuals or physicians to report the true nature of such maladies this estimate must be very inaccurate. The deaths are mainly due to syphilis; over one-third are among newly-born children under one year of age. It is estimated that in our large cities fully 5 per cent. of all the inhabitants are affected with this disease. The whole number affected with the malady in the United States is believed to be about 2,000,000, while 200,000 prostitutes are permitted to cumber the cities and towns of this country and to propagate the malady absolutely without an effort being made to suppress or control the evil by legislative enactment. It is said that not less than 1,000 persons reduced to pauperism by this disease are supported by public expense in this State. All physicians of experience have witnessed the withering blight of this loathsome disease upon new-born babies, but from considerations of prudence have veiled the fact with the patronizing mercy of their silence. It has been estimated that three-fourths of the deaths of children under five years of age in our larger cities are due to this loathsome malady; surely every thoughtful mind ought to be impressed with the necessity of some efficient measures of arresting, by strict sanitary inspection, this horrible corruption of blood in the constitutions of our race, which is so steadily multiplying the ills and miseries of human life.

Small-pox was the cause of only about nine hundred deaths in the United States in 1880. No better argument than this in favor of protective medicine is possible. This malady during the previous century was justly regarded as the greatest scourge of mankind. Its fatality decimated in every decade the population of Europe. In France, before the discovery of Jenner, the mortality from this disease was 30,000 annually. In other countries it constituted fully one-tenth of their total mortality. To-day only the most ignorant are responsible for the spread of this loathsome plague of former ages. No truth is more fully recognized by all intelligent people than that isolation and disinfection will control the spread of small-pox, and if preventive medicine has demonstrated anything it has most conclusively shown that vaccination (and re-vaccination every six or eight years), generally and systematically performed, will prevent its development.

Two other important zymotic diseases of great fatality did not prevail in 1880. We refer to *cholera* and *yellow fever*. There is no reason why the former should ever be found in this country if its importation is prevented. It can not prevail here except by introduction from foreign lands; but when it exists in Europe it has never yet failed to come as an unwelcome visitor among us. Entering our great seaport towns it is rapidly transmitted by steamboats and railroad cars into the numerous towns and cities located on these channels of travel and commerce. But it is well known that by proper sanitary measures it can be kept out of our country, and even stamped out if by chance it finds lodgment here. Owing, however, to negligence and indifference in this regard our mighty nation did but little to protect our population during its last visitation, and in 1873 it invaded thirteen States and spread terror and desolation among the inhabitants of more than two hundred towns and cities. Neither are we powerless against yellow fever. This malady, too, can be and has been controlled by rigid sanitation. Prior to 1805 it prevailed as far north as Boston, but owing to strict administration of sanitary laws no epidemic of this disease has visited that city during the present generation. The same is true of Providence, Rhode Island. Philadelphia suffered seventeen epidemics of yellow fever prior to 1854; but the sanitary government has kept the city free from that date to this. In New York, prior to 1822, epidemics of yellow fever were frequent and terrible, and in some years destroyed her citizens by thousands. Though the growth and density of the population of New York has been almost the wonder of the world, the sanitary bureau has banished the disease from that city, also, and no epidemic of yellow fever has prevailed in the metropolis for more than a half a century. This absence in any of these cities is not due to lack of facilities for importation. Perhaps not a year passes but what cases of yellow fever are taken from the shipping to the quarantine stations. What these cities have done against this disease, other cities can do, and this is equally true of other contagious and infectious maladies of exotic development. But shall we only dread the pestilence that walketh in darkness, and the destruction that wasteth at noonday? A distinguished Southern physician has well said that if cholera or yellow fever appears in a city in America, the whole country becomes alarmed; but we Americans are absolutely indifferent to other preventable diseases, which yearly produce one hundred times greater mortality than both of these maladies combined. It may be safely affirmed that yellow fever and cholera, which so alarm and horrify our citizens are insignificant in death dealing when compared with the more common diseases over which man has absolute powers of control, and which he makes but little or no effort to prevent or mitigate. In 1873 the total mortality from the former was only 8,000, while in the same year the deaths from malarial, scarlet and typhoid fever, from dysentery, diarrhœa, and cholera infantum, from consumption, measles and whooping cough, aggregate alone no less than 192,000. Is life less valuable because sacrificed by the latter diseases instead of the former? "It is true that the havoc of yellow fever and cholera was far more rapid in destruction, but these diseases rarely afflict us more than once in a decade, while the others are always with us, reaping enormous harvests of death each year."

CONCLUDING OBSERVATIONS.

In order to attain health and longevity we must constantly guard against the malific influence of impurity of atmosphere, water and food, the inheritance of a diseased constitution and exposure to contagious and infectious maladies. But individual effort can exercise but little influence in protection against either of these factors. The State is the delegated guardian of man's life, as well as his liberty and property. In all sections of this country thousands of infants are annually born into the world inoculated with scrofula, syphilis, consumption, epilepsy, chorea, insanity, or the alcoholic diathesis, and this often to an alarming extent in the highest society of the nation. If the laws of the State are inadequate to prevent the marriage of diseased persons, and protect children from inherited maladies, such wrongs to society should be at least discouraged by an enlightened public sentiment.

Truly has it been said, "The curse causeless shall not come," and in this day of rapid transit the facilities for diffusion of contagious diseases are such as to seriously threaten the welfare of every community. "Failure to exert controlling power over these affections, either through ignorance or negligence, renders the danger to mankind far greater in this period of advanced civilization than in any, even amid the gloom and desolation of the dark ages. No nation on the face of the globe is so constantly threatened with devastation from portable diseases as America. The immigration to this country of people from all the lands of the earth is unprecedented in the history of any other nation. Into our seaports are constantly landed enormous vessels filled with human freight, composed largely of the restless, dissatisfied, turbulent, poverty-stricken, diseased and oppressed people of all climes and nationalities. Into the great harbors of New York, Philadelphia, New Orleans and San Francisco hundreds of thousands of ragged, filthy and penniless new-made sovereigns, with their little bundles packed amid the squalor and diseases of the dangerous homes from which they emigrated, are hastily thrown upon the wharves, and by hundreds of fast boats are carried over thousands of miles of rivers or over the one hundred and twenty-five thousand miles of railroads, and scattered into every community in America, and with them are carried the infectious diseases of the places from whence they came." And without national and State sanitary surveillance, both at ports of departure and upon arrival in our harbors, the commercial stability, peace, prosperity and happiness of every community are daily jeopardized. Thus are these diseases readily brought into our cities, and as soon as one is driven out another stares us in the face, and the only chance for protection in this day is for the municipality to keep skilled and faithful guardians on the alert to meet and conquer these direful affections. From what has been said concerning the predisposing influences of zymotic disease, we find that the best local sanitation against the development of any one specific disease is almost equally valuable against another. For this reason no community is safe from this class of maladies as long as any one of them is prevalent and will afford the best evidence for improved sanitation. No maxims are more true than a "Nation's health is a nation's wealth," and that "Nothing is so costly in all ways as disease."

But public health can only be advanced by organized effort upon the part of municipal, State and National authorities, and fully empowered by law to enforce the requirements of their important trusts. The members of all organizations to secure these results should be chosen entirely with reference to ability and integrity. Children in all public schools should be educated to understand the elemental principles of physiology and hygiene. Legislators should be educated to understand that the prosperity of our nation depends upon the health of its citizens. Engineers and architects should be educated to understand the most perfect sanitary arrangements for sewerage and ventilation in the construction of all residential or public buildings. "Ministers of the Gospel should be educated to know that a violation of the laws of health is a violation of the laws of God, and that when the consumptive, the syphilitic or scrofulous man or woman enters the holy bonds of wedlock and the issues of such marriages die in infancy and they are called upon to conduct the funeral services, that it is blasphemy to speak of such a death as a manifestation of Divine Providence and loving care of the infant in removing it from future temptation and sin. When zymotic disease is decimating a filthy community, let them not insult God by praying that He will cease to kill the people." Let them remember that nature's inexorable laws are not suspended in this world for man's benefit, and that petitioning for a day of fasting and prayer, to induce the Heavenly Father to save them from pestilence, is inexcusable, if not blasphemous ignorance, as long as towns and cities are reeking with those causes and sources of contagion which breed such maladies.

On the great plains of plague-stricken Asia, centuries before the Christian era, the query: "Shall such ills come by chance?" was then answered—

"Like the sly snake they come
That stings unseen; like the striped murderer
Who waits to spring from the Karunda bush,
Hiding beside the jungle path; or like
The lightning striking these and sparing those,
As chance may send."

Shall the intelligent clergymen of to-day meet this problem with no more rational interpretation than the ancient Buddhists in the earliest dawn of the world's history? We trust not. But it is the physician after all who, by long experience and the acquisition of the accumulated knowledge of the past, who *knows* concerning the causes and prevention of disease, and to him alone is in reality delegated the high and sacred obligation to preach the gospel of health. All accomplished and successful physicians are in these days also intelligent sanitarians. And recognizing that the health of communities and even of nations often depends upon the health of individuals, they, with unselfish devotion to public interest, seek to inculcate among "the laity" all knowledge that experience and observation have taught relating to personal and domestic hygiene, in order that the greatest good may result to the greatest number. Under this policy results of the most important character are constantly being obtained in what is termed public hygiene. Even by the most rudimentary or imperfect methods of sanitation, which as yet alone is practicable, the most terrible forms of disease have been banished. The *plague* and *leprosy* have been practically obliterated in every civilized country, and other contagious and infectious diseases have assumed a much milder form. With more efficient sanitary measures all of the so-called *zymotic* and *specific forms* of disease which have so scourged the world will certainly become more and more rare, if they do not altogether disappear.

QUACKERY.

BY H. V. SWERINGEN, A. M., M. D., FORT WAYNE, IND.

Having been requested to contribute something for the present Annual Report of the Indiana State Board of Health, in casting about for a subject, the idea suggested itself to my mind that I could not better serve the people of the great State of Indiana, the laity, into whose hands numerous copies will be likely to fall, than to point out some of the forms of quackery imposed upon them, to the end that they may in the future learn to discriminate between the *student* physician, honest in his purpose, who consecrates his *all* to the service of his profession, doing with his might what his hands and his talents find to do, and the brazen-faced, impudent quack, who preys upon the credulity, the physical and the monetary systems of the populace.

Quackery has ever been a most prolific theme for the medical-journal contributor, or the medical-college valedictorian, but the special form of it which shall, on the present occasion, occupy our attention—*i. e.*, the quackery of the pulpit, practiced only by those who use the pulpit to advertise their business—has received but little notice.

The ranks of the medical profession, representing the various schools or "pathies" extant, have become so crowded, competition has become so fierce and keen, that all kinds of schemes have been resorted to in order to secure practice. One of these comparatively modern departures is so diabolical in its conception and sacrilegious in its practice that it deserves not only the swift condemnation of the professions it outrages—those of medicine and theology—but the severest rebuke and most supreme contempt of the laity whom it is intended to reach and control.

As may now be anticipated, I refer to the medico-theological practitioner, or preacher-doctor, who wields a most potent lever for purely selfish purposes in his use of the Christian pulpit. It is a species of quackery more contemptible than that practiced upon the street-corner, accompanied by the song and dance of the low comedian, and the extraction of molars in the vulgar gaze of the curious lookers-on.

Before proceeding further in the contemplation of this subject, I wish to state that whatever strictures I may make upon this class of quacks, they are not intended for any, if such there be, who are honest in their purpose and pure in motive, though erring in judgment or led astray, perhaps, by precept and example. I would be the last man on earth who would stoop to wound intentionally the feelings of a pure Christian gentleman. I was myself raised in the church upon the pastures of which the preacher-doctor principally fattens, and shall ever hold dear the religious instruction imparted by a Christian parent. But when I see preacher-doctors resort to all the petty little tricks practiced by the veriest quacks, and violate openly the code of ethics of their professions, or one of their professions—a code the lessons and principles of which they affect to revere and to teach and inculcate into the minds of their brethren—I feel it my duty to treat the subject of medico-theology somewhat in extenso, and there is no more proper place for such treatment than in the annual report of a State board of health.

I disclaim any personality in my treatment of the subject in its general aspects. My aim is at the class of preacher-doctors, and not at any individual member thereof, so that the charge of being actuated by a spirit of animosity or personal jealousy can not in reason be urged against me. The individual who is in possession of attainments that excite my jealousy is also in possession of that moral character that will *command* my respect and consideration.

What I may have to offer upon the subject, however mildly and respectfully written, will antagonize certain persons and their friends, I have not the least doubt, but that this fact constitutes a valid reason why the truth and sound doctrine should be suppressed, I most unequivocally deny. Not a single step in advance, in all the history of the past, has ever been made in science, politics or religion, that did not antagonize certain persons and their friends. An article upon the subject of prostitution, a theme eminently proper for discussion in a State Board of Health Report, might with equal propriety be objected to because it antagonized certain persons and their friends. If there be a single representative of the class I am opposing of the opinion that the position I assume in regard to it is untenable, unjust and unsound, he will no doubt have an opportunity to ventilate his views in the same medium which contains my own, and thus may truth finally triumph, and the grand object of a State Board of Health be attained in every particular, direct and indirect.

There are thousands of people the world over who think that a doctor must necessarily be a much better physician by being also, at the same time, a preacher. Upon this class of people the preacher-doctor has his eye, and from which he receives his subsistence. They are, generally, church members, and are readily duped and humbugged, as is proven by the fact that the vender of patent medicines receives greater returns from advertisements placed in their religious, church or denominational papers, than he does from the same placed in the daily secular press. And how often do we see in our daily papers the prefix "Rev." before the name of a vender of a remedy, intended only to catch this same class of persons, for which the preacher-doctor has laid his trap.

If, as was written or published a short time since in the *Lancet and Clinic:* "No decent physician ever advertises himself in the newspapers or parades himself before the public in other ways," be true, what must be said of the man who not only resorts to these practices, but adds thereunto the quackery of the pulpit? The same journal answers the question when it says:—"A theological quack is the most contemptible character that could be conceived," etc., etc. It is in the interest, therefore, of the lay reader that this subject should be discussed in its bearing upon the preservation of public health. The minds of the laity should be disabused of the idea that a practitioner of medicine must necessarily be a much better physician by reason of his being also at the same time a local preacher. On the contrary, I shall endeavor to convince them by unanswerable, logical argument, or, rather, ordinary common sense, that a preacher-doctor must, necessarily, be neither a good physician nor a good preacher.

On page 24 of Dr. D. W Cathell's recent book entitled "The Physician Himself," etc., occurs the following sensible advice: "Avoid double callings. Divorce medicine from everything else," etc. etc.

It ought to be a self-evident proposition to every sane person that no man can be a physician and a preacher and do justice to either profession thereby represented. The science of medicine comprises so vast a field that it is impossible for the mind's eye to take in the landscape in its entirety, a proposition that seems to be fully demonstrated by the fact that the disposition of the profession of the present day is to divide itself into specialties. Each of the departments of the profession has grown or expanded itself into a great branch of science, and any single section is sufficient of itself to occupy the lifetime of the student in working out and studying it in detail. It is therefore not possible for the human mind to embrace all of these departments in their whole extent or relations to each other. The man who attempts to get a smattering of everything that is going, on the wing, robs his patients and his profession of time and attention that is justly their due. As showing the manner in which the Philadelphia Conference of the M. E. Church handles the preacher-doctor, I copy the following from the *New York Times:*

"Annually there are turned out from the University of Pennsylvania and the Jefferson Medical College, representing the old school of practice, and the Hahnemann, the new school, about 500 doctors. Some bogus medical colleges, with high sounding titles, have sprung here in consequence of the high standing of the regular colleges. One of these has been discovered in the Philadelphia University of Medicine and Surgery, where diplomas could be had upon the payment of a small amount of money, and the applicant given the right to begin the practice of medicine at once. This institution was managed, until a few years ago, by Dr. William Payne, who figured entensively in the George O. Evans case. He closed the place out *to a party of Methodist ministers, who preached on Sundays and ran the college during the week. The Rev. T. B. Miller. M. D., was Dean, the Rev. William Major, M. D., Secretary, and the Rev. W. V. B. Ingraham, M. D.. was President. These men were all well known in the Philadelphia Conference, and their standing in the church served their purposes well in leading many persons to become students at their college.* Two weeks ago John Norris, of the *Philadelphia Record*, called at the eollege (?) and paid Dean Miller $25, in return for which he received a certificate entitling him to begin the practice of medicine immediately. Then the exposure began, and has been carried on since with unremitting energy. It was developed that the charter under which the institution operated was repealed by the Legislature in 1872, but this has not prevented the faculty from issuing diplomas. Men who had attended at this place only four months had been given diplomas. Among these was Frank Gratton, who will be remembered as a witness in the Latroumeille murder trial, at Albany, in June, 1879. He had a diploma from this college, but was only here a short time. While all these flagrant violations of the law have been shown, and the evidence has been at hand, the District Attorney of the county has seen fit to allow this institution to continue its operations. The Methodist Church, however, took up the fight against its ministers, and the annual Conference, which adjourned last night, appointed a court to try the Dean and Secretary of the bogus college. Both men were tried, and the result was that Dean Miller was expelled from the church and the Conference, and the Rev. Mr. Major, M. D., was suspended for one year."

A fine posse of preacher-doctors, surely. Is there any other evidence wanted of their motives than is contained in the foregoing?

It is a notable fact that many preacher-doctors are seldom found in the Sunday School or in the prayer-meeting "where two or three are gathered together in His name." Such occasions do not answer their purpose. They are ever at those times so harrassed by professional duties at all hours of the day and night, that they seldom find a quiet hour where care will not intrude. But give them an opportunity to appear before the great congregation,, and they will be sure to get in their work in the shape of the administration of the Lord's Supper, the delivery of a temperance lecture, or a sermon upon the relations of Christianity to the practice of medicine, taking "Luke, the beloved physician," as the text. With such opportunities as these before them, they will break off an egagement with a patient to fill a subsequent one with an audience, feeling assured that should the patient pass into the hands of another physician during their absence, they will make sufficient impression upon the audience they address to more than compensate them for the loss sustained. They are always to be found in nightly attendance upon an enthusiastic protracted meeting, also.

In order to show the purity of purpose of at least a few members of the class, I am obliged to appeal to individual facts, though not to individual names. Upon one occasion I examined a preacher-doctor, who, though then in charge of a congregation, was a candidate for graduation at a certain medical college. He said he thought a diploma would be "a nice thing to fall back on" should anything happen him, and that a little practice among his flock would very materially aid in swelling the amount of his revenue. He was given the very simplest examination and failed to answer one question correctly in ten. He could not give me the source of opium, the officinal preparations into which it enters as an ingredient, nor their doses. On another occasion I asked another preacher-doctor the dose of "*meconium*." He answered, "About ten to fifteen grains." Most persons are satisfied with the smell of or an accidental inunction of their fingers with this article, without submitting to its internal administration. And still another preacher-doctor seeking a diploma, who stated that he had considerable experience as a druggist also, did not actually answer ten questions in twenty quizzes on materia medica and therapeutics, the very branch in which he claimed to be better posted than in all others.

Preacher-doctors are continually exhorting physicians to maintain the dignity of their profession and observe strictly the code of ethics of the American Medical Association. They are large dealers in sentiment. Now, the world is full of sentiment; beautiful sentiment, lofty sentiment, grand sentiment; and when it emanates from men whose lives are in accord with it how noble and refreshing it is. But, ever since Judas kissed Jesus, sentiment has been very cheap; everybody is dealing in the article; such a drug in the moral market has it become that the man who indulges in very much of it is at once suspected of attempting to run a corner in it. I am told upon reliable authority that there was once upon a time another member of the class, who, while delivering temperance lectures, delivered also within his stomach several glasses of beer upon several authenticated occasions.

One would naturally suppose that a preacher-doctor would do the least to offend the code of ethics of the American Medical Association, and yet the cutest, slyest, most cunning and most frequent and reckless newspaper advertisers and paragraphists known to the profession, in certain parts of the country, were members of this class; hardly an issue of any of the daily papers near them will occur but in them will be found the names of these "double-headers" in connection with some wonderful operation they have performed or are about to perform, while at the same time they are incapable of writing a decent prescription or are actually committing the most inexcusable blunders in therapeutics, diagnosis or surgery.

It is certainly obvious to the most superficial observer that the preacher-doctor is denounced and disowned by both the professions he endeavors to represent. Methodist, Presbyterian and Baptist ministers, from the pulpit and from the rostrum, speak boldly in no complimentary terms of the class, and the voice of the medical profession is no less unfavorable concerning it.

Prof. Roberts Bartholow, in an address to a graduating class, spoke as follows: "For the physician, diligence in business means the entire consecration of his time and intellect to the service of his profession. For him, attention to other affairs signifies neglect of the one supreme purpose. Is it politics that withdraws him from professional pursuits? No influence could be more baneful. The political doctor is never a great physician. Is it the church that absorbs his attention? Piety becomes the physician and enforces his devotion to duty, but when the doctor aspires to the work of the minister and combines in his own person preacher and practitioner, he makes a sorry figure in both capacities. To have a pew in the most fashionable church and to be called out betimes is a traditional but well understood trick, no longer useful. The modern doctor is wiser. He attends the minister gratuitously, superintends the Sunday-school, and is ready with prayers for the sick in the nature of exhortations to the healthy to avail themselves, when ill, of the services of so *good* a man."

It can not be otherwise than that in this age of concentration of thought and study the *motives* of the preacher-doctor will be impugned. He has even been likened unto the diminutive but very ambitious bantam hen that endeavored to hatch on a dozen goose eggs; her continued efforts to cover them all not only resulted in spoiling the whole nest, but in ruin to herself. No man can spread himself over so much surface without being mighty thin in some places.

But how snugly ensconced is the preacher-doctor between theology and medicine! Theology on his left and medicine on his right. He is therefore, he thinks, entitled to more consideration than the ordinary minister because he can practice as well as preach, and to more credit than the ordinary physician because he can minister to the soul diseased as well as the body.

But the duties of a preacher-doctor are indeed onerous. To-day occupying the highest seat in the synagogue; to-morrow giving character by his presence to some noted funeral; here seen in full uniform in a masonic procession; there showing himself at a Methodist picnic; yonder participating in a temperance meeting and now doing the agreeable at a church social; in the morning preaching and in the "witching hour of night" practicing the resurrection of the dead; this week prescribing for some poor devil and next week preaching his funeral sermon; here signing a marriage certificate and there signing a mortuary report; now searching for gall-stones at a *post mortem*, then administering the holy sacrament or making a digital examination; here smoking and chewing and spitting, and there pushing his way, uninvited and chair in hand, from a modest seat with the audience in the synagogue, to a conspicuous position in or near the pulpit.

Now, if the idea suggests itself to the mind of the reader that preacher-doctors clothe themselves in the livery of the court of heaven for the purpose of serving the devil, and that, if the object at which they aim justifies the means they employ to attain it, the church is fit only for the prostitution of her pulpit to the secular advancement of her ministy,—if such a thought arises, choke it down instantly, for that will be considered persecution and jealously.

It ought to be unnecessary, then, in this, the evening of the nineteenth century, to inform the lay reader, that by the better class of physicians, well aware of the difficulty of fully mastering even a single branch of their profession, and by the better class of ministers, who find an abundance of mental pabulum in the theological fields of thought to occupy their whole lives, preacher-doctors are regarded with feelings akin to pity and contempt. It may have been well enough in the days of St. Luke for a man to preach and practice medicine—a time when the pulpit was not used as an advertising medium—but the necessity for so doing has long since ceased to exist, and, if he were to return to our world to-day, he would not recognize his professions, so great has been their development. As already stated, there *may* be some preacher-doctors who are imbued with the spirit which actuated the practioner in the days of St. Luke, but the great majority of the subjects I have met or of which I have read, can hardly be considered worthy representatives of the class, or they would scorn to lend themselves to a violation of the code of medical ethics, or to a participation in the machinations, petty strifes, groveling designs and artful intrigues which are too often associated with the secular professions, though are not necessarily of them.

This class of physicians are also given to the most reckless exaggerations in their reports of their cases. Time will not permit me to enter into detail upon this matter. I could cite numerous examples in which by sheer fraud they have succeeded in worming themselves into the medical literature of the times. Thus may it be seen, however, to what base uses the pulpit and the medical press, and, likewise, the secular and religious press may be put to further the selfish interests of the quack. It is thus that the honest, pure, earnest student of medicine becomes misled in his search after truth. Medicine as a science is inexact enough at its best without the necessity of resorting to any such dishonest extraneous aid. There is nothing that renders a medical journal so valuable to the profession as truth, honor and integrity upon the part of its contributors. If a knowledge of medicine is valuable, it is only so in proportion to its accuracy. As we rely on history only when we have confidence in the veracity of the historian, so should we rely on papers on medical subjects only when we have confidence in the veracity of their authors. The medical journal of to-day should be as nearly as possible a perfect living record, a history whose pages must ever be open to receive the observations which are constantly being made by those who are honestly engaged in scientific pursuits; a record from which the physician may at any time ascertain reliable information upon the many varied subjects it presents; and the position of medicine as a science must eventually result from a re-arrangement of the innumerable details which accurate observation may disclose and unfold. It is necessary and often advantageous to look back upon the past and see what has already been done, so that its venerable facts may not be lost sight of, but grouped in series with the extensively verified experiments and observations of the present day. It is by observation only that medical science can either be created or perfected; consequently false and imperfect observations form the greater obstacle to its improvement; hence, the most searching scrutiny should be exercised upon the part of medical publishers into the character and standing of the authors of the contributions they receive. The only way to remedy this unpleasant condition of the profession is to agitate in it this hitherto overlooked and neglected question, and, so far as the secular press is concerned, to educate the people upon the arts of the charlatan; the latter more particularly is the object of this article. Every usefully educated man is a rallying point of progress in every direction, and they who multiply these nuclei of free thought, these watchfires of republicanism, are patriots in the truest sense of the term, and worthy descendants of those venerable sires, who, to purchase this right, staked in an hour of hope forlorn, their fortunes, their lives and their sacred honor.

The *student* physician, the sincere, honest, educated practitioner of medicine, would much prefer to practice his profession among the intelligent and educated, while the quack and impostor, the boastful pretender, would rather the masses should remain ignorant, especially upon matters pertaining to the science of medicine. It is, however, still a fact, that many intelligent, well educated people, display a wonderful ignorance of medicine as a science, and reason from the most untenable premises in relation thereto. Many of the brightest lights of this and centuries past have been the dupes of charlatans. The sheer impudence of the latter has, in not a few instances, forced them upon the favorable consideration of the former, and many an apparent victory has been achieved by pure "cheek," to use a term more forcible than elegant. "Fools will rush in where angels fear to tread." The ignorant pretender will venture where the modest, learned physician would tremble with a feeling of incompetence, the former occasionally reaping an accidental, unmerited reward, upon the principle, "nothing ventured, nothing won." The preacher-doctor, especially, will straightway approach a Gross or a Simpson, an eminent physician or a celebrated divine, with as much familiarity as though he ranked equally with them; and, indeed, this is the impressions he desires to convey to the spectator. He will lock his arms with that of the hero of the hour upon the slightest, most formal acquaintance, and walk off as triumphantly as though *he* was the hero and his companion was seeking the honor of *his* company. Upon all public occasions he may be seen occupying, without invitation—he never waits for an invitation, that being but a mere matter of form, anyhow—a conspicuous seat, arising betimes, ostensibly for some very important reason, that he may be the observed of all the observers, desiring that no one of the great audience should depart without the knowledge of his presence, or that the observing stranger may inquire of his seatmate: "Who is that important-looking gentleman now standing upon the rostrum?" He watches eagerly and wistfully those having charge of the exercises, hoping that an invitation may soon be extended to him "to participate," and, if not extended, he will manufacture some kind of an excuse for participating anyhow, thus enabling him to add another to his many advertisements. He will even turn his excuse into some kind of an advertisement. Advertising, unique, peculiar advertising, is his business, his fort, his stock in trade, his specialty, his study. He lays awake at nights studying, not medicine, not disease, not surgery, not medical or theological ethics, not the all-absorbing question, "If a man die shall he live again?" not how can we reach the masses for their souls' interest, but how can we reach the masses for their purses; how can we best advertise ourselves.

To all newspaper articles or communications to which the modest and learned physician would simply subscribe his name unadorned, he never fails to pile on the "M. D.," or "Dr.," or, if addressing a minister, the "Rev." He gets in his work in a thousand different ways; it is astonishing the multiplied resources which the preacher-doctor commands, and with what cunning he will turn the most apparently insignificant things and circumstances into account. He will squeeze and worm himself out of the small holes and tight places with wonderful alacrity, artfully dodging arguments or issues which, should he make an honest effort to meet and squarely discuss, would expose his ignorance; he is an adept in evading these results at every place except the witness-box as an expert. Occasionally he gets absolutely stuck; if in a moral point of view, he will get right down upon his knees and ask forgiveness, not of the person wronged, but of the person or persons in authority, or whose business it is to investigate the wrongs he has committed; he will play upon the natural, human sympathies of these persons, even though he be obliged, himself, to kneel in the dust of humiliation and confess his cussedness. This procedure he considers much better than to allow his accusers or prosecutors to appear against him more publicly, which would be ruin absolutum.

Every case the preacher-doctor treats is most dangerously ill; an acute follicular pharyngitis is always with him, or, in his opinion, a diphtheria; the mildest attack of any ailment is extremely hazardous for several reasons. If the patient dies, the friends will have been previously prepared for the dissolution, and not be taken so much by surprise, feeling that the doctor must be very "smart" to foretell the event, or well posted in prognosis, and they will not be apt to want a consultation, which might be disastrous to the attending physician by exposing his ignorance. If the patient gets well, he will receive the more credit for having cured him. If he asks for a consultation, it is invariably with some one more ignorant, if possible, than he himself is, and, if the patient dies, the consultant gets the credit of killing him. He is up to all kinds of tricks. One woold suppose that he, of all others, was less given to them. If a prominent physician or minister in the community takes ill, he will visit him daily, ostensibly as a friend only, but knowing full well that the public will very naturally suppose that *he* is the attending physician, and that he must necessarily be a good doctor or Dr. So-and-so or Rev. So-and-so would not employ him.

It is very natural for a physician with any considerable practice to be very jealous of it, and if at any time he is taken ill or for any reason becomes unable to attend to it, he is very apt to place it, for the time being, into the hands of a practitioner who will be least calculated to retain any portion of it when he gets able to resume it. If there are any preacher-doctors in the neighborhood, they usually get these temporary practices, because it is presumed that their piety would prevent them from resorting to any underhanded means, having for their object the robbery of one or more patients. Under these circumstances the preacher-doctor makes the very best of his opportunity, and gets in his work with amazing cuteness, covered by the cloak of the other half of his calling.

How to gain reputation and consequently a large practice in the shortest possible period of time, is a conundrum that has ever racked the brains of the young physician, and of late years occasions him far more distress and anxiety than did the probability, aye, *possibility*, of failing in obtaining his diploma. If it was as easy to get a large, first-class, lucrative practice, and retain it, as it is to get a diploma in the majority of the schools of this country, the young practitioner of the present day would have uninterrupted sailing into the port of wealth, ease and reputation. There are various methods adopted by men in the profession for the solution of the above problem, but they all resolve themselves into the one general method, that of advertising. Although advertising in the public press is obnoxious to, and in direct violation of the spirit and the letter of the code of ethics of the American Medical Association, it does not, in many instances, seem to make any difference to certain members of the profession. They will advertise anything and everything, no matter how trivial or false it may be, in order to get their names in the papers, to keep them before the people. They seem to vie with each other in constructing and publishing these newspaper paragraphs. Physicians claiming the utmost respectability, those who profess to be Christians and have attained unto the grace of sanctification, who, in fact, occasionally preach, are guilty of this open and flagrant violation of the code, and when expostulated with, will dodge the issue by saying that the offensive publication was made without their knowledge or consent, and that they have always requested the reporters not to publish their names in connection with these items of practice.

Of course, they do thus request, and the reporter understands all about it, but yet their names appear "all the same." It is a good deal like the notice of "caution" printed on some patent nostrums for female complaints, a caution against their use under certain circumstances by reason of their tendency to produce abortion. This "caution" is fully understood by the purchaser, and constitutes the only recommendation of the article. But in the matter of advertising by physicians in the manner already noticed, this dodge will not answer. The code is explicit on this point. A physician is forbidden by its provisions not only to voluntarily publish his professional doings, but to allow, "to suffer," their publication.

But, after all, this disreputable practice will not always secure the desired result. As a rule, those physicians whose names appear most frequently in the public press have the least amount of practice, and the better class of community will not be influenced to any great extent by this scheme, which is so well understood. The public has become aware of all these tricks and artifices of the physician, and the latter will, in the end, certainly lose by them. To drive hurriedly by a church as the congregation is leaving it, or to be called out of the same during service, will attract those only whose practice will stick to no physician.

Another mode of advertising, of making an impression upon the public, and practiced by the medico-theological practitioner, is to get one or two most intimate friends—without his knowledge, *of course*—to go around with a subscription paper for the purpose of purchasing a present for him, to be presented publicly, in the presence of the reporters and as many influential citizens as can be inveigled, as a complete surprise and in token of his many estimable qualities of head and heart. This artifice, if properly and carefully conducted, will sometimes work well with the unsuspecting. But it is extremely risky and hazardous; not a few of the like have been exposed by the hired girl or one or more of the innocent children.

Another scheme is to become connected with or organize a medical college, where the preacher-doctor constitutes himself, elects himself a professor. But the public is getting on to this, also. Medical colleges are becoming too numerous; the woods are full of them; every cross-roads has one or more, each "raising the standard of medical education," "for the present session, however, it is optional with the student" whether the "standard" is raised or not. (*Vide* various medical college announcements.)

Another scheme to get practice, which very naturally includes all other schemes, if I may judge by experience and observation, is to become a local preacher and circulate around in the various pulpits every semi-occasionally, preaching upon "the relations of Christianity to the practice of medicine," taking Luke, the beloved physician, as the text. This will make a powerful impression on the unsophisticated young convert, the unsuspecting old brothers and sisters, and bring many a dollar that would not otherwise be secured. But the operator must be careful to have his daily walk and conversation correspond with his professions, or exposure will be sure to follow soon or late.

In a lecture delivered at the Court House in Jackson, Ohio, before the Ohio Valley Medical Society, May 10, 1883, by Dr. A. L. Knight, of West Columbia, West Virginia, the Doctor paid his respects to the preacher-doctor somewhat in length. I wish I had space to give his remarks in full. I quote only a few of them: "Please notice that I use the word profession in the singular. I say, without fear of successful contradiction, that it is not within the intellectual capacity of any man to successfully and practically follow any two or more of the learned professions. * * * Now, I have the highest respect for the man of God who walks in the footsteps of his Divine Master, who, with a contrite, humble heart, strives, by constant meditation, to learn the true mysteries of godliness, who searches the scriptures in all their various reading, reads the multitudinous commentators who have labored in the same cause, who, in fact, devotes his best energies in the cause of his profession, and for no other motive than the salvation of souls. But for the local preacher with a secular business, who invades the sanctuary in a hypocritical spirit, and simply uses the pulpit as an advertising medium for his business, trade or profession, I have the most supreme contempt. * * * Writers on political economy urge a division of labor as the most conducive means to skilled labor. * * * History informs us that the most progressive, useful and celebrated men have been those who devoted their whole energies for the accomplishment of the best results in their special pursuits in the various avocations of life. This being granted, with what disrespect should we look upon the 'Jack of all trades and master of none.'"

And now, in conclusion, I desire to say that I have no objections to any man engaged in any of the ordinary secular businesses of life being a local preacher; such a combination is well enough perhaps. Paul, I believe, was a sail maker. But I hold that it is utterly impossible for a man to be a preacher and a physician and be able to do justice to either profession thereby represented, and the motives of the man who attempts to pursue both professions may well be questioned.

I am well aware that the objection to the church which is urged because of the immorality of many of her members, is deficient in sound reasoning. The defective character and the hypocritical conduct of a portion of its merely nominal members can not, in equity, be adopted as a criterian by which to judge of the merits of any institution. The mortifying fact must be conceded, while it is deeply deplored, that through laxity of vigilance on the one hand, and decay of discipline on the other, the church has too often been polluted by the unhallowed footsteps of the licentious and the base. The sin of such miscreants must lie at their own door. The church ought not, in reason, to suffer from the conduct of the hypocrites within its enclosures, and the discerning portion of mankind will ever be more just than to visit upon the whole church the vices of some of its recreant members. They will not condemn it because bad men dishonor it. As well might we pronounce the beautifully chiseled column inelegant because here and there upon its shaft were seen the disfigurations produced by the corrosions of time. If the church may be justly censured because bad men are found among its members, then, by parity of reason, it should be commended when good men are enrolled among its constituency.

But the church should, as much a possible, avoid even the appearance of evil, and her pulpit especially should be guarded with zealous care. The eyes of the world are now, more than ever before, intently fixed upon the Christian church, and her progress watched with unusual interest. There should be a few more Philadelphia conferences scattered throughout the country, to rid the church of the unworthy preacher-doctor, who plays no part in, but interferes with the speedy evangelization of the world. The church throughout the land should purge herself once in a hundred years at least of every vestige of effete matter. Nor should the dose be administered by medico-theological quacks, but by those who live, move and have their very being in the very ministry of Jesus Christ.

I am not wholly unmindful of such lessons as "Let him that is without sin among you cast the first stone;" "Judge not that ye be not judged;" "First cast out the beam out of thine own eye, and then shalt thou see clearly to cast out the mote out of thy brother's eye." Nor am I entirely out of sympathy with that doctrine that permits the tares to grow along with the wheat, so long as the former do not materially interfere with the growth of the latter. It is a grand doctrine full of wisdom and mercy. The fear expressed by the inspired writer, that in plucking up the tares the grain, the good seed, the wheat, may likewise be plucked up, has always appeared to me peculiarly Christlike and self-evidently born of God. But if I may be allowed to judge from the atrophied condition of a considerable portion of the grain, and the cyanotic hue it presents, the wheat of the church of the present day is rudely choked by some means, and the inference naturally arises that the tares have taken possession of the field. The tares surely have no business in the pulpit. The pulpit certainly should contain nothing but the good grain, the good seed, the wheat, and it should be watched carefully by the husbandmen of the church. It should be weeded as ofter as occasion required, and, if attended to promptly, there will be no danger of plucking up a single stock of wheat. I submit the foregoing hastily-arranged thoughts for the purpose of counteracting as much as possible a growing evil, an abuse of two of the leading professions, heretofore not at all or insufficiently dwelt upon.

PLEA FOR CHILDREN, BORN AND UNBORN.

BY JOHN E. LOCKRIDGE, M. D.

State Boards of Health are not, like charitable and benevolent institutions, established and sustained wholly on humanitarian principles, but they are largely maintained on principles of political economy, conducive to the production of and proper sanitary care of a numerous and healthy population, which is the prime requisite of a great and prosperous commonwealth. Granting that this is one of the cardinal aims of the board, it should guard sedulously the very portals of human existence, exercising even more than a parental care over both the new born and the unborn; encouraging the largest production and wisest sanitary care of the former, and discouraging and punishing to the utmost extent of the law the destruction of the latter. One of the very first divine injunctions contained in Holy Writ is, "Multiply, increase, and fill the land."

The pessimist and misanthropist would doubtless hold that at this period of sin and sorrow it is not desirable or politic to encourage an increase of population, and especially in Indiana, where the population is already co-extensive with the confines of the State. But one who thus reasons must indeed be a very superficial and unwitty observer, since it is only necessary to consider that some of the old trans-Atlantic countries like England and Germany, and even some of the older States of our American Union, have a population many times double that of our own State to the square mile, and yet they are the most prosperous, contented, and happy commonwealths on the habitable globe.

It is true that Indiana is comparatively a new State, and she has room for a large increase in her population, but she has long since passed that period in her destiny when it was practicable to obtain colonies of large size of industrious and thrifty people of either domestic or foreign birth, our public domain being nearly all seized and settled, although some of it sparsely. Such being the case, our increase of population of late years has been very miscellaneous, almost cosmopolitan, indeed, and tending too much to the adventurous. Nothing is so desirable as tending to the moral and material prosperity of the State, at this particular era of her history, as a healthy and normal increase of her indigenous population, and, as I will endeavor to demonstrate further on in these paragraphs, this latter increment is the very one that is now, and has been for a decade or so, attempted wickedly to be kept in abeyance, and the void is being filled by a less substantial and less desirable immigration.

Now, as to the sanitary care of new-born babes and children of a tender age, most persons, doubtless, will hold that their parents, and especially mothers, are best qualified to deal with this question of the welfare of their own offspring. This is true only to a certain extent; true as to the personal wants and little attentions to those of tender age; but there are many other matters, pertaining to diet, temperature and clothing about which the advice of a wise and experienced sanitarian would be of incalculable value in conducting children safely through childhood to sound and robust manhood and womanhood.

One of the most striking and saddest things that one from the Southern States observes in passing through the cemeteries of the great Northwestern States of our Union is the very, very large proportion of short graves, mute reminders of sad bereavement and anguish! It is difficult for one who has not had this experience to imagine what mournful impressions such a spectacle engenders—households depleted, fond and valid hopes crushed, and ambitions ruined forever by the impartial and voracious destroyer! The causes are in part unavoidable, and in part, I think, measurably avoidable. The rigorous climate, the prime cause, is of course unavoidable; the temperature, diet, clothing and the general regimen can be very greatly modified and controlled; and; in my opinion, much of the trouble is due to an injudicious management of these latter. About twelve years ago the writer for the first time traveled over Indiana, Illinois and Iowa to a considerable extent, passing most of the winter and spring of 1873–74 in Central Iowa, and it was in the latter where the observations were most critically made.

The shire town at which I sojourned was about fifteen years old, and the settlers in the county of more than twenty years' duration were very few. The people, generally, were occupying their first permanent dwellings; the houses were all wooden and very small, very close, double lined, and interlined throughout and overhead with a kind of very thick paper. They were very neat withal, and well suited to keep out the cold. In each of the very small rooms into which these houses were cut up was a base-burner stove, which was twice or thrice larger than necessary to properly heat these rooms, kept red hot from morning till night, and generally from night till morning; and, consequently, the rooms were kept so stiflingly hot that a handful of powder would almost ignite if thrown out into the room. The stores, churches and places of amusement were feelingly kept at a temperature even higher. Out of such bake-ovens as these, infants and children of tender age were almost daily carried into a temperature of from twenty to twenty-two degrees below zero during the winter months. On all sides the children were sick and dying of bronchitis, pneumonia and pleuro-pneumonia; and almost invariably dying, for I heard of very few getting well who were reported as being very ill. The cause of so much sickness and death seemed unmistakable to me. The transition from the extreme temperature within doors to the opposite extreme without was absolutely greater than mortals of a tender age could endure. There were seemingly no other adequate causes for so much sickness in that region, either meteorological or telluric; the air was invariably dry and fine, there was not a drop of rain from December to March, and very little snow and slight accumulation of it, and no thaw.

The diet and clothing, too, of infants are almost invariably faulty, with a strong leaning in both toward excess, and more especially where the parents have the means to indulge this mistaken exhibition of affection. How often we are called upon to behold the spectacle of a very small bulk of baby and a very large bundle of clothes. They must put on their short skirts and long gowns, linen ones and flannel ones, plain ones and fancy ones. The articles of dress should be as few and as simple as are consistent with comfort and decency; and on going out in cold weather comfort and safety should be secured by resorting to an abundance of light and warm wraps.

Errors in diet are less common than those of temperature and dress, yet they are amazingly frequent and shockingly absurd. Just as soon as the young hopeful is the possessor of two or four teeth, and long before it ceases to nurse, with an air of pride and triumph, its imprudent mother boasts that it eats much the same diet as older children and others, such as meat and potatoes, apples and bananas, candies, confectioneries and the like. It would seem that the slightest physiological wit or maternal instinct, or even common sense, ought to dictate a more rational diet.

Any discussion of the feature of this subject pertaining to an increase in the new-born necessarily involves the consideration of the destruction of the unborn, for the latter is but a corollary of the former. The exercise of any concern about the welfare of the unborn by the optimist and philanthropist would doubtless seem like a paradox to many of the unwary, who, lured by a false and fatal delusion, trust that the hope and joy of approaching maternity, and the anxiety for personal health and welfare would invariably prompt mothers to scrupulously and unceasingly guard against any and all causes which could vitally interrupt the ante-natal growth and wellfare of her offspring. But, alas! how delusive are such expectations in many, very many, cases.

The unwitting causes of disaster at this period of human existence are comparatively few, but yet they are sufficiently frequent to enlist the attention of the earnest sanitarian and philanthropist. But, shades of Hippocrates! it is the voluntary, deliberate, and importunate desire of very many young wives who are about to become mothers in these degenerate times, either to thwart reproduction or disturb gestation, if the latter be already the condition. It must be the common experience of physicians in this locality to have young married women come to them and importune them most zealously and piteously, either to establish some bar to conception or, as the case may be, to dethrone the fœtation already existing. Just as soon as that periodical monitor and physiological emblem of her sex is conspicuous by its absence, if only for a few days, and to her a sure harbinger of fructification, she hastens to her doctor, or *some doctor*, and importunes him to rescue her from the impending calamity! If she be nulliparous, the plea is that in these times of fashion and frivolity maternity is undesirable and shocking for a period of less than three years after wedlock. In the case of the multiparous, considerations of health, comfort, social requirements and obligations and financial stress preclude the desirability or even practicability of any increase in family responsibilities.

The cases under consideration belong alone to those in legal and holy wedlock, in the best social and moral standing, and to whose descendents the commonwealth should look in a large measure for material to fill her high stations and maintain her justly high renown. In these remarks no notice is taken of the scores of illegitimate cases that yearly beset every physician in this community with piteous appeals to rescue them from their shame and impending disgrace. But, disclaiming even a fortuitous championship of any religious sect, in justice to the adherents of the Romish Church, I must say that they almost unaminously eschew this diabolical practice, from conscientious scruples, doubtless, and the confessionary features of their faith. The consideration given to this subject has not been engendered by fancy or imagination, but it has been aroused by personal experience and most positive evidence of hundreds of cases in point; and cases, too, against which no successful action could be maintained, since the only evidence obtainable would be that of the parties implicated on the one side, and the obligations of the Hippocratic oath on the other. In order to impress the declaration, I will succinctly but truthfully rehearse a few cases which are but types of scores of this kind:

Several years ago a gentleman of the highest moral and Christian standing came to me in behalf of his most excellent wife, who was the mother of two children and two or three months on the way to an additional maternity; but owing to financial stress and the contemplated embarkation on an enterprise of vast importance and consequences, further responsibilities in this direction were deemed to be most undesirable, if not positively impracticable. A physician of the very highest standing, then and now, had for a month been attempting to the utmost of his reputed skill to dislodge the cause of so much regret and gloomy forebodings. I had but little difficulty in persuading the husband to allow nature to take her course, and in about a week he returned to me with the assurance that his wife had very reluctantly consented to the same course. I was urged to take charge of the case, as the lady was thought to be in a very critical condition. She was constitutionally very frail, and was so much reduced and bedridden by the heroic drug treatment resorted to, that, had the efforts been *cursed* with success, the destruction of two mortals would have been almost inevitable. By careful treatment the lady finally rallied and in due course of time this effort was *blessed* with the presentation of a boy, than whom a finer or more handsome one scarce treads the State and in whom are centered the affections of these most worthy but misguided parents, even to a greater degree apparently than in both of the others. The enterprise was duly undertaken and pursued to a degree of success not dreamed of in its inception.

A young woman of most excellent social standing, a type of the best female development and vigor, the mother of one lovely child three or four years old, and her husband's finances allowing every reasonable desire to be gratified, importuned me in vain, time and again, to forcibly release her from the obligations of a hated additional maternity, which was then only four or five months off, and for no other reason than that she did not desire and positively would not again assume the cares, anxieties and social restrictions of maternity. A doctor, however, of means, age, experience, and fair professional standing did the wretched deed *tuto, cito, et jucunde,* even at this advanced stage, and according to a disgusted female member of this family he had performed the same service for her at about the same stage of advancement three or four times before. This last time, however, it was scarcely done *cito,* because he had to operate the second time before nature would surrender her charge, and scarcely *tuto,* for her alarmed husband came to my office a few nights afterward, on the eve of his enforced absence from the city for a time; the lady had just had a severe chill with other symptoms of puerperal trouble, and her *particeps criminis* was also absent, and the husband gave me the particulars in full and asked for advice. This lady became my most implacable foe, going so far as to allege that I was anxious to perform this ignoble deed for her and was offended at her because she would not consent I was no longer the *family physician.*

Several years ago I was called hastily to attend a young woman, the mother of one child three or four years old. She was of good social and most excellent religious standing. She was suffering from some severe shock, almost pulseless, and writhing from an excrutiating pain in the lower part of her abdomen. I could not obtain any immediate history of the case, and could only give her present relief by a hypodermic injection of morphia, together with the ordinary remedies in such cases. By and by she told me that she abhored the very idea of additional maternal cares and responsibilities, and that the periodical talismanic monitor had been in arrears, lo! these *twelve days;* and being in mortal suspense and agony, she was furnished by a lady friend with a certain well-known syringe with a very short barrel and a very long nozzle, with minute directions how to use it. I suggested that perhaps she had made an intra-peritoneal, instead of an intra-uterine, hot-water injection, as she had intended, since it was immediately followed by excruciating pain and some hemorrhage. She contended that such was impossible, as she knew just what she had done. On the next day there was plainly to be felt a tender and circumscribed block of inflammation on the left side as large as an orange, between the uterus and ovary and above. She escaped with her life, perhaps, only because the inflammation remained circumscribed. It turned out afterwards that it was a *false alarm.*

A young woman, the mother of one child five or six years old, and with a causeless and morbid aversion to any increase in like responsibilities, came to see me every month or two for nearly a year in mortal dread and mental agony lest she was about to travel again the same parturient road her mother trod with pride and joy. At first she had some slight and perfectly explicable irregularity in her feminine functions, which was promptly regulated, and remained so; and I had the satisfaction, at least, to send her away each time convinced of her error, and with a crushing array of gloomy phantasies vanished to thin air, only to return periodically in a similar state of demoralization. Finally, after an absence of four or five months, she returned in a state of the greatest excitement and mental agitation, with the declaration that she was now a "monster in size," and that I had been mistaken all the time in her condition. She was but little more than an exaggerated skeleton, at best, and after manually demonstrating to her that on pressure there were not two inches thickness of tissues between the umbilicus and spinal column, and that now more than a year had elapsed since I first gave a negative opinion in her case, she was convinced of the absurdity of her idea of her immense corporosity; and in a state of almost unutterable joy and contentment she departed, and probably died from overjoy, since I have not heard of her since. This misguided woman was intensely earnest and determined, and cheerfully backed her assiduity with her gold.

A young woman, the mother of one child six years old, presented herself, filled with regret and mortification because she was three months on the road her mother had trod to insure her own existence; and as full of determination to thwart nature, and begging piteously and persistently to be released from this hated and horrid predicament at all hazards, and regardless of danger to herself, or any wrong, or any infraction of the law. She was a type of female vigor and development, and had no valid plea for such a course, except a morbid aversion to the social restraints, and the cares and responsibilities incident to such a relation. For an hour or two I tried in vain, as I then supposed, to reason this most excellent woman out of this terrible alternative, for she left me, doggedly declaring that she would go to one of two physicians, whom she named, and who, she knew, would perform the service for her. One of these doctors, of high social and professional standing, had often regularly and statedly rescued an intimate friend of her's from a like predicament. The other one—of the very highest social, religious and professional standing—had time and again relieved her next-door neighbor, but was, unfortunately, protractedly absent from the city the last time just at the period at which the work had been done, and she was forced to employ another doctor of equally high standing, who was recommended by the absentee, and who operated skillfully, successfully and satisfactorily. I heard not one word from this good family (in which I had practiced regularly for years) for nearly six months, and supposed the *fœtus*, as well as the patronage, had gone forever, for such is always the result in these cases where there is a *dead secret* between them, when one day I was approached by the husband and notified that his wife would require my services as accoucher in a few days. I was more than gratified to realize that the feature of my plea for the unborn, pertaining to personal danger and the terrors of the law, had had a restraining effect. The fruits of this uneventful gestation, and safe and most speedy parturition, was of the sex most earnestly desired by the entire household; and I am sure that I have never witnessed more earnest expressions of joy and gratification at an arrival than were manifest in this whole family.

There can be no reasonable doubt but that the seeming stern demands of society, the acme of civilization and advancement, considerations of health, comfort, finance, and *otium cum dignitate* impel very many ladies of the highest social standing to seek this ignoble alternative, and there is but little less doubt but that scores of doctors and others in every community willingly perform this service for them periodically, and with as little conscientious scruple as they experience in any other service they render. And one runs the risk of being denounced as an old fogy who even mildly calls attention to certain frivolities and excesses incident to an epoch of extreme social and material advancement. But this subject should be pregnant with interest to the philanthropist and political economist, and worthy the serious consideration, at least, of every humane and law-abiding citizen.

Powerful and prosperous States, like healthy and vigorous individuals, are but the embodiment and totality of sound elements and organs, with the normal and unmolested performance of their respective functions; and the former like the latter are subject to retrograde metamorphosis and utter decay whenever violence is done to one or more of these component elements, or a general and persistent perversion of their functions is effected. Nature will not long tolerate a violation of her laws and thwarting of her designs; and wide-spread individual transgressions constitute national sins, and an offended Deity has ever inflicted the severest penalties on nations as well as on individuals.

All history teaches us that it is but a step in the career of a nation from the highest pinnacle of civilization and power, with its attendant shams, vices and excesses, to the antipodal point of retrogression and ruin. We will venture a retrospect to almost prehistoric Sodom and Gomorrah, with not five just and righteous men and not *one* good woman; these were swiftly and completely swept from the face of the earth! Come down a millenium to ancient Nineveh and Babylon, with their teeming millions, their civilization, advancement, and vices, and fertile old Mesopotamia, with her immeasurable resources and unspeakable prosperity; the sites even of the former are now almost matters of conjecture and dispute, and the latter has for ages been little more than a barren and forsaken delta, trod only by half-civilized wanderers.

Come down about another millenium, and consider the history and fate of Rome, with her wealth, power, and influence, exceeded only by her pride, excesses, and treachery; the famed, iterated, and reiterated *domina mundi*, and her renown and dominion limited only by the horizon. And, finally, thoughtful and judicious reader, to what status of affairs has another millenium brought us? To a state of extreme enlightenment, surely, the whole world over almost. But when we consider the avariciousness, the homicides for gain, and suicides, feticides and patricides, the fancies and frivolities of fashion, and the increasing disposition to shrink from the cares and responsibilities of this life, and the constant perversion of the laws of nature, let us beware lest we may fall into some of the pitfalls of the seeming prosperous and exalted, but doomed and damned people and nations of the past.

INDIANAPOLIS, November, 1885.

HEALTH IS WEALTH.

W. F. CURRYER, M. D., THORNTOWN, IND.

To say that the prosperity of a State or nation is vitally dependent upon the physical integrity or health of its people, is so reasonable and self-evident that demonstration is unnecessary. Every sick or physically unsound person is a hindrance to the efforts of all those who constitute a part of any country or community, and are, therefore, a source of weakness to the whole people. All those who require care, protection and support are consuming the time and the result of the labors of others, and can only be regarded as obstacles or drawbacks to the general prosperity and enterprise of any people.

The individual who produces nothing, or who does not perform valuable service of some kind, has no just claims upon the charities or favors of the community of which he is a member.

The greater the number of dependent members upon any country or people, the greater the burden and the greater the drain upon their vital energies; and in the event of a war or famine the less resistance they can give, because of these depressing influences.

There exists in Peru a society which has formulated a system for removing its unproductive members. The old or infirm are smothered, the sick are visited, and, should they not have favorable symptoms, a committee is sent to strangle them.

The early Greeks, in some localities, required all persons who attained the age of sixty to be put to death by drinking the juice of the poisonous hemlock. Socrates himself drank this hemlock poison to satisfy some persons who were ambitious to gain his station and influence and wanted him removed. In those early days the law of "the survival of the fittest" was taught and practiced.

"Self-preservation is said to be the first law of nature." This law applies with the same force and power to nations as to individuals. In ancient times, in the more densely populated districts where the necessities of life were scarce and where it was a constant battle for existence, means must be had to prevent famine and starvation among the people. Emigration, perhaps, did something to relieve this over-population, yet the ancients found legislation on this subject necessary. The public safety demanded a rigid enforcement of the law controlling the population. Public safety was the supreme law, and was carried out far beyond the limits of common despotism, in order to meet the demands of the times. In more recent days the old and helpless in some countries have been driven out to die in order that the vigorous might survive and do battle for the protection of home and country.

Those governments with inhumane laws that do not have proper regard for human life, or give more attention to the accumulation of wealth and power than to health and to the protection of human life, are but courting destruction and inviting disaster.

Human life and health should stand first with every country and people; it is paramount to all else, and should have the best care and protection the government can afford or give. Life is nature's method, and its propagation is enjoined by Holy Writ. "To multiply and replenish" is the command, and anything that cheapens or militates against life in any manner detracts from the laws established by God himself.

Civilization is known from barbarism by its having a greater regard for human life. In civilization the babe at the breast is surrounded by the strong arm of the law, and not left to the fancy or whim of a brutish parent or individual.

Political economy includes not only the science of wealth, but the protection of human life. The accumulation of great wealth by a nation is not always the best evidence of power and greatness. It can only become great when supplemented by human life, health, education and industry.

The political economics of a nation never attain the hight and dignity of a science until it combines and encourages a proper regard for human life and health. No nation can achieve greatness under an unhealthy sky. The atmosphere must be life-giving and invigorating to create physical and mental soundness in her people.

Health is the most important factor of individual or national greatness. No people or country can achieve prosperity or power without good sanitary regulations, without good health.

A malarious climate or insalubrious air will devitalize and conquer the best army and generals under the sun. The baneful influence of bad air on an army is more potent or destructive than powder, ball, sword or bayonet. What is true of armies is also true of nations and individuals; what is true of a family is true of a community. No sickly or diseased people can be prosperous, or long retain power, even should it be "thrust upon them."

The United States has, by humane legislation and liberal encouragement, done much to increase her population. The fertility of her soil and salubrity of climate have also contributed materially to her enterprise and wealth, yet we have had some severe lessons. Our shores have had visitations of cholera, yellow fever, and other dreadful epidemics, which spread dismay and death among us. In recent times quarantine has done much to hold in abeyance or prevent a wide-spread devastation from these dreadful diseases; still, there is no protection or prevention like a good sanitary condition.

These epidemics thrive only upon unsanitary conditions, bad air, impure water, and uncleanliness.

Epidemics are more to be dreaded than conflagrations, yet we have made ample provision for protection from fire in nearly all large cities.

In some of our Southern States, during our late visitation of yellow fever, the people fled to the mountains and plains to shun this walking pestilence—this almost certain death. The business houses and all property were left to the mercy of adventurers and strangers.

The government that provides good sanitary laws, and rigidly enforces them, does more for the prosperity of her people than she could by the most lavish donation of money or lands.

Give the people health and wealth will surely follow. It is an impossibility for an individual or community which is constantly sick to prosper; these conditions are incompatible, antagonistic; so are health and filth, they must be separated. Filth is but the nest for the incubation and development of disease; these elements of death must be banished before health can be sustained. Cholera, yellow fever, and other filth diseases can be eradicated, can be washed out of a town or community by care and perseverance, as was demonstrated by Gen. B. F. Butler at New Orleans during our "late unpleasantness." "Cleanliness is next to Godliness." Epidemic influences can not thrive or grow where everything is kept scrupulously clean and sanitary matters are given the proper consideration and attention.

Boards of health and other administrative bodies should exercise great care and thoroughness in their work. Public sanitation is too vital a matter to be handled by the careless or indifferent. Public health is public wealth; it should be regarded as anterior to, of the first importance, and one of the essential elements of the prosperity of any government or country.

Health is the bulwark of safety for a nation, country or people, and should have the earnest support and protection of legal enactment and official enforcement.

We need laws regulating and enforcing a better system of drainage, of ventilation and of cleanliness; our people should have better protection against bad air and pestilence. We should have laws requiring each school to teach a plain, practical course on hygiene; let every scholar understand the necessity of cleanliness, of good air, of proper bathing and correct living; have the children practice calisthenics until, by correct habits of living and growing, they become strong men and women, the hope and support of our country.

We want careful restrictions placed upon the liquor and opium traffic, that our people may not suffer from their baneful influences. In our judgment, the hope of the nation depends upon a well-conducted system of education. Teach the people the laws of life from childhood, and these principles become engrafted into their very existence and they practice and teach them for the benefit of their families and posterity.

Boards of health should be encouraged in the dissemination of literature teaching the laws of life and health.

The most economical legislation we can encourage in this country is upon hygiene; everything that can be done to prevent disease and prolong life will contribute to national greatness and power. Give the people health and they will conquer all difficulties and achieve renown and glory.

VACCINATION.

WM. LOMAX, M. D., MARION, IND.

The merit of vaccination as a prophylactic against the ravages of small-pox is conceded by an intelligent public opinion the world over. But in many instances there is an acknowledged uncertainty as to the immunity acquired, growing out of an inability to correctly estimate the extent to which the general system may have been brought under the influence of the remedy. Observation has taught us that a well-defined cicatrix may be regarded as reliable evidence of protection against the disease. Deviations from the typical mark may invest the sufficiency of the remedy in some doubt. And these may be so great as to render it uncertain whether the least protection has been obtained, or, indeed, to force the conclusion that the operation has been a perfect failure.

Hence, the necessity of repeating the vaccination until success has been assured. Another source of error in estimating the value of vaccination may grow out of the fact that in many cases the normal physiological functions of waste and supply of the tissues of the body may wear out the immunity which for a time the remedy has given, leaving the subject liable to subsequent attacks of the disease, or its modified form, varioloid. When this is demonstrated even in a mild form it is calculated to weaken confidence in the protective powers of the remedy. In cases where a vaccine pit exists, and where the vaccination was really never perfect, or effectual as a protective measure, as well as those in which the restraining virtues of the remedy have become exhausted, the non-professional observer, unacquainted with the habits of the disease, is very liable to be misled, and to conclude the whole proceeding of but little value as a prophylactic. To such as may have been led to doubt the efficiency of the remedy it would seem to me the facts of a terrible scourge in the little town of Eaton, Delaware county, would furnish valuable and convincing proofs. A year or two prior, two families of the name of Whitaker, emigrated from Virginia, and settled temporarily, in or about the town. They were illiterate, ignorant and self-willed. An order had been recently issued by the S. B. H. for a thorough vaccination of all unvaccinated persons of the State. The order was promulgated by the county and local health officers, which produced no small discussion among the masses.

Some, approving the order, readily complied with its requirements. Others objected. Among the latter were the Whitakers. They not only refused to be vaccinated, but defiantly resisted the order, and it was not enforced. Some time after this one of the men made a trip into some of the counties south to procure a place to move to. When he returned home he felt languid, chilly, alternating with slight febrile reaction, wandering pains in body and limbs, headache, lumbago and a pretty full expression of the prodromes of fever. Steadily and rather rapidly growing worse, a physician from Granville was called to see him. Not improving, Dr. Sage, of Hartford City (who furnished the materials of this report), was called in. He found the patient laboring under high febrile excitement, with a rare cutaneous eruption over the body, presenting the appearance of a diffuse carbuncular inflammation. Neither of the physicians was satisfied in relation to the real character of the disease. Others of the family were successively attacked in a manner similar to the first. There were eleven members of the two families, and when six were struggling under the crushing violence of the malady, the County Health Officer was called upon for consultation in the dreadful scourge, but confessed himself unable to diagnose its true nature. Two days after he made a second visit, and examining the patients at pretty long range, pronounced the disease "Small-pox!" Ten of the family died, leaving but one, a little girl, the only surviving member of the two families. She was as unmistakably marked with the distinctive pits of true small-pox as any case to be seen.

When the family became prostrated and unable to take care of themselves, some of the neighbors who had been vaccinated went in and nursed them. When the true nature of the malady became known, and the nurses found themselves in the midst of a most loathsome and devouring contagious scourge, and not knowing whether their vaccination would prove a barrier against the disease or not, speedily left the premises. After this the sick were nursed by three men who had previously had the disease. It would naturally be expected from the known immunity a previous attack gives, that none of the last relay of nurses would take the disease. And none did. All others who had been equally exposed to the contagion and were vaccinated escaped, while every one who had not the protection of a previous attack or vaccination took the disease and died, with the exception of the little girl, who came out badly scarred by the disease. The mortality attending the scourge—ten deaths in the eleven cases—shows a most fearful malignity. The fatal energy of the pestilence and mortality accompanying it, evinces the concentrated form and power of the contagion. The condition and surroundings furnished a combination of circumstances peculiarly calculated to subject vaccination to the severest test of its protective virtues. The escape of all who were vaccinated proves an absolute power of the remedy to protect against the most virulent form of the disease. The effect upon the mind of the community, the doctor informed me, led to a general and thorough vaccination of the citizens, without arbitrary interference of the officers of the law.

GLANDERS.

BY CHARLES C. MORRIS, M. D., PARKE COUNTY.

John W. Jessup, aged thirty-six years and two days, a prosperous farmer and an honored citizen of Parke county, living about six and one-half miles northeast of Rockville, died August 11, 1885, and from the symptoms, progress, and fatal termination of the disease, there was no doubt of it being a case of equina or glanders.

As soon as the case was reported to me I proceeded at once, as county health officer, to investigate the case, and the following report is an epitomized statement of the result:

A visit was made August 13, 1885, to the late residence of J. W. Jessup, and the following was told by Mrs. Jessup, the widow of the deceased:

Mr. Jessup took his bed July 31, 1885; had been complaining for several days previous to taking his bed. On Wednesday, July 28, he was helping thresh wheat and had to quit from feeling sick; he had sensations as though a wheat beard had gotten into the left eye; his left eye was swollen when he got home the same evening; both eye lids were swollen. On Thursday, July 29, he returned and helped thresh wheat again until evening; he shocked his oats on this night, his left eye still swollen, and some "eye water" was used; slept tolerably well at night. On Friday, July 30, symptoms worse, but was still able to be about the farm; more general pain about the body. On Saturday, July 31, swelling all gone in left eye, and a little "festered point" on the inside of the lower lid of the left eye of which he complained; also great pain in right side of his head; no sores on his body anywhere up to this date. On Saturday, January 31, Dr. Marion Goss, of Bellmore, was sent for, whose report of the case forms a part of this paper, and will be seen further on. Mrs. Jessnp further stated:

When he got off the straw where he was helping thresh wheat he turned sick and blind, but got better, and worked on until night; went home, ate supper, went to bed as usual, and rested moderately well; felt weak, and complained like one would with rheumatism; asked his wife if she did not think his eye looked like the horse's eye that was sick; vomited several times; breath not offensive; no offensive smell about the bed until the last; had had abscesses on him frequently for twenty years, but was not suffering in this way at the time of this attack; he went on getting worse until he died.

I next proceeded to look after the horses, which were reported as being diseased, but not feeling satisfied to use my own judgment—not being a practical veterinarian—I thought best to report the whole subject to C. N. Metcalf, our worthy State Secretary, requesting him to co-operate with the State Veterinary Surgeon. Accordingly Dr. Metcalf, State Secretary, and Dr. Pritchard, Veterinary

Surgeon, visited Rockville, Parke County, and on August 15, 1885, in company with Dr. Marion Goss, of Bellmore; Dr. W. H. Gillum, Health Officer of the town of Rockville, and myself, as County Health Officer, visited the stock on the farm of the late J. W. Jessup, deceased, where two horses were found suffering from what was supposed to be glanders, and they were ordered to be quarantined; also two horses belonging to the father of the widow were found to be diseased, and were condemned as having glanders; also a mule in another part of the county was condemned. Quite a number of horses were examined by Dr. Pritchard, but these five mentioned were the only ones condemned.

The following is the account given by the attending physicians:

MARION GOSS, M. D.

Was called July 31, 1885, to see John W. Jessup, aged thirty-six years. Found him in bed complaining of severe aching pains in limbs, back and head. These symptoms had continued for several days, perhaps three or four. Considerable pain in left eye, which was slightly swollen. He thought it was due to a wheat beard, for he had been threshing wheat.

Found upon examination a small ulceration about a line in diameter in the lower part of the conjunctiva by eversion of the lower lid. Some intolerance to light. The pupils slightly contracted. Think the ulcer was caused by a beard, which had escaped, by ulceration. Had had chilly sensations. Tongue coated. Bowels constipated. Moderate thirst. Pulse 86. Temperature 101°. Treatment: Fluid extract aconite, and a purgative dose of c. c. pills, to be followed by fifteen grains sulphate quinia. Applied solution of cocaine, to be followed by a lotion of acetate of lead. Directed opium, if necessary, to relieve pain in limb or eye after the purgative operated.

Saw him next August 1. Very little change, except the eye was considerably swollen. Impossible to examine the eye-ball. Slight redness and swelling of the skin below the eye. Pulse 90. Temperature 99½°. All the aching in different parts of the body continued. Treatment: Fluid extract aconite, lotion of acetate lead, opium, solution chlorate potass., tr. ferr. mur. and sulphate quinia.

Saw him next day, August 2. Slight change. Had been delirious during the night, and seemed more stupid. Swelling and redness had extended beyond the left cheek to the edge of the right. Left eye swollen till the ball could not be seen. Pain the same. Pulse 96. Temperature 101½°. Continued same treatment. Directed the case to be placed in the care of Dr. J. F. Cross the following day, as I was compelled to leave on an extended trip.

Remarks.—On my first visit my thought was that the trouble was due to overexertion and exposure to heat and debility. Nothing about the eye indicated the severe result that followed. On my second visit I thought I was dealing with a mild form of erysipelas developed from the wound of the conjunctiva, and rejected the idea of glanders, which was considered on the ground of its slow progress and mild symptoms. In fact, I did not consider the case very serious. On my third visit I saw no deviation from the usual course of that trouble, except the delirium from so limited an extent of surface affected, which is unusual. There was no discharge from the nose or mouth at any period. No appetite for food at any time. I do not doubt it being glanders from symptoms given by the attending physician on my return. My theory of it is that the poison was introduced into the eye from the patient's hands; from thence carried to the ulcer, where it was readily absorbed; and do not believe the *first* cause of ill-health was the *virus*, but that the specific malady was developed secondarily.

J. F. CROSS, M. D.

Was called to visit Wesley Jessup on the 4th of August, 1885, who had been attended by Dr. Marion Goss for several days previous to my visit. Found him with *apparently* a well-marked case of erysipelas of the upper portion of the face, which seemed to have commenced at a spot a little below the left eye. Pulse quick, considerable fever. No appetite, some headache and general pains all over the body. Applied, locally, tinct. ferr. mur. and also tinct. iodine. Next day was worse. More fever, eyes nearly closed, symptoms generally worse. Third day, eyes nearly closed by swelling, fever continued. There appeared little nodules or lumps on different parts of the face, which I lanced, when a good deal of dark pus discharged from them. Opened, perhaps, a half-dozen or a dozen. Nose became perfectly black and full of small holes about the size of a small knitting-needle. The nose was also thoroughly plugged up with a tough, gluey mucous, which protruded through the nostrils. It was so tough that it could not be removed with the forceps. Light was very painful to him. Could not open his eyes at all after the third or fourth day. Gradually grew worse from the first visit until the eighth visit, which was on the 11th, when he died. There was a very offensive odor about his person, which filled the house. I endeavored to combat the symptoms as they developed, but each and every remedy seemed of no avail. At first I thought the case a well-marked one of erysipelas, but now am satisfied it was not. I should have said, further, that a day or two before the patient died, dark livid spots appeared on different parts of the body—on the arms, hands, legs and feet.

This is given only from memory, as I made no notes of the case at the time.

VENTILATION.

BY S. R. SEAWRIGHT, M. D.

While great improvements have been made in building, so that exterior beauty and interior convenience have been greatly advanced, the one all-important matter (so far as health is concerned) of ventilation, has been left mostly to chance. It is true that beauty and convenience will be found to be nearly allied to ventilation; but the latter has not been made prominent as a first necessity. It may be questioned whether the highest attainment in artistic effect and economic arrangement can be reached unless in subordination to the highest end, which is *life*.

Buildings should be made for men, and not men for buildings. A few years ago, indeed very recently, a Sabbath was spent by the writer in a flourishing town; attendance was given to religious services in a beautiful church, where all was pleasing to the eye and impressive in surroundings, but not more than three words in five could be heard distinctly, because of some acoustic defect. In passing out one of the officers of the church remarked to the writer, "That now they had a good and beautiful church, if they could only find a man to suit it," and the suggestion in answer was, "Why not build a house in which any ordinary voice could be heard, and then the question of a preacher would be much simplified."

There are many homes which are about all that need be desired, only *life* does not prosper in them. The "breath of life," in a physical sense, is pure air, and o this there must be sufficient. Two things are to be considered in building, first, the location as to surroundings and the possibilities of pure air; second, the plan of the house as to the circulation of air through it, and the capacity of its rooms according to their occupancy. As it is not the purpose of this paper to discuss localities in which it is best to live, but the matter of ventilation, we pass the first point suggested with only this remark: Make the best selection possible under the circumstances. This done, the great and all-important thing is, how you build your house. Still more essential is this if the location be unsatisfactory. "The river of national health must rise from the homes of the nation." This is philosophically and scientifically true.

Home ought to furnish the restorative agencies, for the place of toil or business can not always be of health-giving character. There are kinds of manufactories and classes of merchandise which must needs be produced or marketed at disadvantage in this respect. A slaughter-house, a rolling-mill, a brass foundry, a machine shop, a knitting factory, a chemical works, a paint store, are not especially conducive to health; besides, toil of whatsoever character is exhaustive of life forces. Yet the principal effort has been to construct workshops, churches, school and other public buildings with special reference to light, heat and air, *i. e.*, ventilation. This is commendable, and it is even to be greatly desired that further improvements shall be made in this class of buildings. Yet how small a part of human life is spent in many of these, and the greatest concern is felt about those in this class of houses, in which the minimum hours are spent, such as churches, opera-houses and public halls. The workshop, where nine to twelve hours are spent, is usually least of all considered. But what of the *home*, the *dwelling-place*, where part of the days and all of the nights are spent? Save in a very few first-class and costly dwellings, very little special attention is given to this point in their construction; doors and windows arranged for convenience, often to save room or expense, with occasionally a transom, have been deemed all-sufficient. For the summer of pleasant weather, when all openings can be left unobstructed, and so free as to the passing breezes, it is ample, but for the days and nights of the long winter, where every crevice is stopped, these answer but in a small degree the demands of healthful life. That pure air may be had in sufficiency without the chilling draught, requires a more careful arrangement. The old form of house, with its open fire-place in every room, was a far more practically, though unconsciously, scientific provision. And this reference suggests the only specific recommendation we care at this time to make, viz.: Every dwelling of more than one story in hight ought to have a ventilating shaft, or chimney, into which every room should have an opening. The construction and connections of such a ventilator need not greatly increase the cost of an edifice if only the plan is scientifically made, and in cases of sickness this additional facility in the sick-room would often make the difference between continued illness and recovery. Relatively, the greater importance attaches to this matter in the dwellings of the poorer and laboring classes, those whose life-force is so severely tested by constant toil and scanty food, because of low wages or high prices. The houses built for rent and rented chiefly to such persons, and especially large tenements, occupied by two or more families, are often criminally lacking in health facilities. And while municipal ordinances require fire-escapement, no care is taken to forestall the "living-death" in unwholesome, because unventilated, houses.

Mr. George Peabody, of London, set an example in his improvements for the working classes, which ought to excite emulation in many another city.

And among other works of sanitary reform this matter of proper ventilation should not be regarded as subordinate. When we reflect upon the wondrous influence of the pure air in banishing even the worst forms of infection, so that we need only to allow the winds to blow often enough through a charnel house to purify its atmosphere, and then add the other consideration, that this same effete matter is absorbed in the sweep of the atmosphere, and all that is deleterious eliminated from it, we have a more vivid conception of the value and importance of free fresh air in the sick room.

An isolated pest-house does not become a center of pestilential influence, because of the circulation of pure air around it, which catches up and carries off the exhalations from it.

It has not passed out of the memory of many of us how the sick-room was guarded, lest a breath of cool air should enter it, or, indeed, of any air, except what was there from the beginning of the attack, and how the patient lay burning with fever and with quickened inspiration endeavored to breathe over again and again the impure and already exhausted atmosphere, while not even a drop of water to cool the parched tongue was allowed. And when some common-sense person, doctor or other, suggested the ventilation of the apartment, how all were shocked as if a reckless murder was about to be perpetrated. For the most part more intelligent views now prevail, not so universally, however, but that, not unfrequently, the well-informed physician must assert his right of control.

Too much care can not be exercised in the sick-room, both to secure ventilation and to prevent a *draught* of cold air, for it is not the cold air that is injurious, but the manner in which it comes to the patient. Hence the necessity of an arrangement by which this fresh air can be introduced, so modified in transition that rapid and sudden change of temperature should not be experienced by the sick one. The impure air lies near the floor of the room, and by some such arrangement as has been suggested that air can be drawn off under the floor to the ventilating shaft. This would not only prevent cold draught and purify the atmosphere of the room, but also greatly assist in the easy and equable heating which has much to do with the healthfulness of an apartment. Another consideration is of great importance in this question. We have hitherto spoken with principal reference to men, as of the toilers in shops and places of labor, and, therefore, as needing the recuperating power of healthy homes. But there is a far larger class of persons interested in this reform—the wives and children, who are as four to one, and whose lives are continuously in the home. Pale-faced wives and puny children are traceable in no small degree to ill-constructed houses. Common humanity and regard for the welfare of coming generations call for more special attention to physical surroundings of the dependent classes.

And in this one matter of well-constructed dwellings, society can work efficient reform, if thoroughly aroused to the need.

CHOLERA INFANTUM AND THE SANITARY CARE OF INFANTS.

BY W. A. FRITSCH, M D., EVANSVILLE, IND.

The mortality among infants from cholera infantum in the large cities of the Eastern States is so great that sanitarians and philanthropists have come forward to assist physicians in the work to heal the sick and to prevent the disease as much as possible. Hospitals and sanitariums for infants and children have been built and equipped. "Fresh-air funds" have been raised by newspapers, and large sums were expended last summer in New York to send children to the country, or in giving mothers with their infants occasionally a trip to the seashore. Cholera infantum is so much feared in New York, Philadelphia, Baltimore, etc., because it is there every summer, and is so very fatal in those densely populated cities. But not alone in the East and South of the United States cholera infantum prevails so extensively and brings so many infants to an early grave; it is in our State also the most dangerous among children diseases.

The annual reports of the Indiana State Board of Health give us the following death rate from cholera infantum, diphtheria, scarlet fever and pertussis:

REPORT FOR THE YEAR.	DEATHS FROM			
	Cholera Infantum.	Diphtheria.	Scarlet Fever.	Pertussis.
1882 (nine months only)	590	161	69	106
1883	520	309	114	183
1884	651	239	178	152
1885	627	411	195	76

These figures are, on account of deficiency in the reports from some parts of the State, which the Board could not yet remedy, too low, but they give us at least an idea of the prevalence of cholera infantum in the State compared with other diseases of children. The deaths from cholera infantum occurred nearly all during the months of July, August, and September, and a majority of them in the first year of the infant's life. There is no doubt that many infants might be saved from death, resulting from this disease, if more careful attendance be given to them and the habitation, with its surroundings, where the young baby is to grow up, would be always in a healthy sanitary condition.

The great mortality among young children is the best proof that in hygienic culture we have not far advanced. A young man or a young woman may easy enough resist for a long time the evil which, through a poisoned atmosphere, poor nourishment and unhealthy surroundings undermine their sound constitutions, but with the young nursling, weak and helpless, as he commences the battle of life, such evil influences tell at a moment, and it is the parent's duty to guard against them.

That the young mother understands her duty well a good education is necessary. This our schools and the good example of her parents must give her. Our schools need improvement; we must lay more stress on the realities of life than on fiction. The living languages must be of greater importance to us than the dead languages. We may learn something from the Germans and French, our cotemporaries, but we will find nothing new in old Greek and Latin books. It has been said that our school boys carry now more wisdom home in their school bags than the seven sages of old Greece dreamed of. That is certainly true, but what is the use, then, for our girls and boys to learn Greek and Latin, to translate the commentaries of Cæsar into English and unravel the description of the wooden bridge he built over the Rhine, when our people have built the grandest structures over the Ohio out of rock and iron to stand for thousands of years. A little more chemistry and physiology is of much more importance to our young boys and girls than to learn how "*mensa*" is declined and "*amo*" is conjugated.

Physicians who, in their laborious duties, have preserved elasticity enough to espouse the cause of hygiene and progress will find pleasure in giving information whenever, to their patients and attendants on them, it is necessary. They despise the old autocratic, routine work of ordaining and prescribing medicine; they reason with their friends, explain matters whenever it is possible and advisable, rely not altogether on medicine, but in a great measure on nature and the intelligent co-operation of their patients and friends. Such physicians, if called to an infant sick with the diarrhea, which has yet no tooth, but, as the mother says, eats "potatoes and everything what comes on the table," will think it much more important to give the mother a lecture on digestion instead of prescribing for the baby some medicine.

Summer complaint, the popular name for cholera infantum, is somewhat a misleading name, as this simple complaint during the summer months develops so often in a severe disease, which statistics prove of being in its results so fatal; and it is well for young mothers to know this, that they be cautious, take care of their little patients in the commencement of the sickness and not neglect the case. Because cholera infantum is a disease of the summer months the people often make another mistake in attributing the disease alone to the hot weather of the summer. It is true the hot weather enfeebles the constitution of the infant; we all feel the enervating heat of our hot summer days; how much more the little infant which can not tell us "how hot the sun shines," but cries and frets. A more important connection has the heat of the summer with this disease through the foul air which is produced by the hot sun on decaying matter, especially in larger cities, where people live close together, and cleanliness and neatness are not always observed. Here we find, too, the disease in its most acute and dangerous forms. Another predisposing cause to summer complaint is the irritation and restlessness caused by the infant's teething. The infant having reached the sixth month of life, the inner incisors of the lower jaw make their appearance, and this is a sign that the development of the inner organs have so far advanced that the baby will soon need more substantial food with the mother's milk. The first steps in changing the food of the nursling must be very slow and cautious. Here often a disturbing element appears; the infant often eats some articles of food which it can not digest, irritation of the intestinal canal follows, and the infant gets diarrhea. If the baby has a prudent mother, and if she consults now her physician the diarrhea may be easily checked and the baby become well again. But frequently the mother argues in a different way. She imagines the diarrhea comes because the baby is teething; she continues in her old way of feeding the child, keeps it, perhaps, confined in her bad-ventilated rooms, and of course under such treatment the diarrhea continues, develops into cholera infantum, and the baby becomes very sick. To destroy such popular notions is a very difficult task, and can only be accomplished by raising the standard of education.

If an infant, which is nursed on its mother's breast, is surrounded by so many dangers, how much more is this the case with an infant which is raised by the bottle? The milk and the water, with which it is diluted, have to be selected with much care, and even if milk and water are chosen of the best quality, they may be contaminated through foul air before using, and become detrimental to the health of the nursling. But will and purpose, mingled with common sense and the mother's love for her offspring, will accomplish much, and so we see many infants being raised by the bottle do well. It is to be feared that with an increase of population in Indiana, cholera infantum will increase also. It becomes, therefore, necessary to use all possible precautions against its spread.

For this purpose we must observe the general laws of hygiene, and in establishing the same throughout the State we will certainly diminish this, with other diseases. The cities, towns and villages of Indiana should be put in good sanitary conditions. In our maufacturing cities, we find anomalous conditions, which give the health officer as much to think and to do as the political economist. Here, where capital is created, we find the poorest class of people; they live often in poor dwellings, with other families in company; their sorroundings are unhealthy, they receive small wages, and as a result of all this have much sickness. The people of our cities, which grow so rapidly, should not neglect to buy ground enough and make ample provisions for parks in the interest of the people. Mothers who have small yards at home, and not the best surroundings, need a place to get pure air for themselves and children. We should remember that we eat three to four times in a day, but that we take about 28,800 times breath during twenty-four hours. We need a great quantity of air-food for our lungs, and the purer it is the better for old and young people. The new-born baby may wait three days for the milk from its mother's breast, but it could not wait five minutes for breathing air. The parks should be made attractive, with green grass and flower beds, to bring joy to the hearts of those who have so little in their lives; shade trees should be planted, and benches put under them for the mother to rest on when she is tired of carrying her baby. Last summer, when we had in Evansville very warm days, a steamboat company proposed to lend its steamboat to give the poor children of the city a free ride on our beautiful Ohio. The engineers, firemen, boatmen, etc., all were pleased to do their work without pay, so that the children might have once a nice, fresh breeze on the Ohio. Nearly four hundred persons, children of all ages, accompanied by their mothers or guardians, accepted the generous offer, and for three hours they enjoyed the excursion on the river.

Private benevolence is well enough, and should always be thankfully received, and though future ages may be more just in distributing the wealth among the children of the earth, I believe the friendly feeling of men doing good to their neighbors will never die out, and there will always be occasion for it. But men will, and ought to, look to their country as a land which watches with a father's eye over them, and does not let them perish in despair. Happily, our free government is built on such a broad basis; it promises in the Declaration of Independence to secure for its citizens, "life, liberty and the pursuit of happiness," and the modern state is more and more realizing the fact that all that is done for the poor in ameliorating their condition and preventing disease among them is done for those, too, who do well enough, and keeps from their doors contagious diseases, also. Communities are mightier than one or few persons, and their efforts in the right direction will do permanent good. To advance the standard of hygienic culture we need the help of the medical profession, of the teachers of our schools and colleges, of the public press and of all good and true-hearted men and women. They must help us in disseminating the truth and facts relating to the conditions under which the people keep well, raise their children well and become prosperous.

Our young women who leave fathers and mothers to follow the fortunes of their young husbands are generally without experience in the nursery. Often living under strangers, they are without assistance and advice from relations and women-friends, and if the time comes to take care of their offspring they lack experience. Their physician will, of course, give his counsel, but he follows his calling, and can not be called for every trifle, so it is no wonder that many mistakes are made. In Würzburg, Germany, the young couple which comes before the civil magistrate to get married receives, after the ceremony is over, a paper containing twelve rules, directing the young woman how to care for her baby, when she becomes a mother. These rules were drawn up by a committee of physicians, Dr. Geigel, who is professor of children's diseases in the University of Würzburg, being one of the number. They are concise and useful, and as I can not express myself better on these points, I have translated them from the German, and give them here for further circulation to my readers:

DIRECTIONS FOR THE CARE OF INFANTS IN THEIR FIRST YEAR OF LIFE, ESPECIALLY FOR THOSE WHO ARE FED BY THE BOTTLE.

1. Mother's milk is the best nourishment for the new-born child, and *can not be replaced by any other*. It is, therefore, an unquestionable duty for every mother to give the breast to her baby if possible. Infants who take their mother's breast grow quickest, develop best, and die most seldom. Nursing should be commenced within a few hours after delivery, and be kept up in a certain order: in the first fourteen days every two hours, later on every three hours till the first teeth make their appearance, or at least till the child is six months old. The weaning must be gradual, and not before the baby has taken other nourishment along with the mother's milk. If the milk of the mother (or of the wet-nurse) is not sufficient for the support of the child, recourse has to be taken to artificial food, *besides the mother's breast*—as specified below.

2. If the mother can not give the breast to her baby and, the *next best*, the milk of a good wet-nurse can not be procured, then the baby should receive, from the first till the third month inclusive, only this nourishment: Sweet milk from a cow, boiled and mixed with barley water, through which the strong coagulation in the stomach is prevented. This mixture is to be given lukewarm during the day *not oftener* than every two hours, and two or three times during the night.

3. Barley water is prepared by boiling a teaspoonful of powdered barley (ground in a coffee-mill) with a gill of water, for fifteen minutes, and then straining it. Add to this a little cooking salt and one lump of white sugar. Every day and every night the barley water must be prepared anew, and kept in a cool place, so it does not get sour.

4. As soon as the milk for the baby is received, it should be boiled, put in a clean vessel, which is closed with a cover, or in a bottle closed with a stopper; then it should be brought to a cool place. If this is neglected it may become sour and unfit for use. For infants with constipated bowels, the milk should not be mixed with barley water, but with oat gruel. In diarrhea, especially during the summer months, as little milk as possible should be given; or, one to two days, *only* barley water, and the physician to be called immediately.

5. In the first and second months of the infant's life, two parts of barley water to one part of cows's milk are used. In the third and fourth months, equal parts of barley water and cow's milk are given; in the fifth and sixth months, two parts of cow's milk are mixed with one part of barley water. If the baby is seven months old, pure milk may be given. During the first month of the infant's life, about one pint of cow's milk, diluted with barley water, is used per day, and the quantity is gradually increased as the baby continues to grow, till one quart and more is daily used. This quantity is needed from the fourth month on.

6. It is not necessary to take the milk always from one cow. On the contrary, the same should be changed immediately if the infant, notwithstanding the milk is diluted with barley water in the right proportion, and given in the right quantity, does not prosper.

7. Give the prepared milk in a nursing bottle, covered with a nipple, which should be put in fresh water always after feeding, and cleansed very thoroughly. Nursing bottles with sucking tubes of glass and India rubber are not suitable, because it is very difficult to clean them. If the contents of the nursing bottle are not all taken by the baby, the rest must not be taken for the next meal. As soon as the infant is fed the bottle must be cleaned and filled with pure water till it is used again.

8. The feeding of infants during the first few months with pap and butter soup, as is done by many, is entirely *unsuitable* and *dangerous* for this reason: The stomach and intestinal canal of the infant does not secrete that intestinal juice which is so necessary to the digestion of flour and bread. Such nourishments pass, therefore, for the greatest part, unutilized through the intestinal canal, generate sour fermentation, with much flatulence, diarrhea, tympanites, and all the evil sequels connected therewith (especially great restlessness of the infants), and bring about a large abdomen, while the other parts of the body (for deficiency of good nutritious matter) remain small and feeble; or in other, but rare, cases, these nourishments make fat and corpulent, but *never strong*. Infants fed in such a way are, when they become sick through external influences, always in the greatest danger, and become oftener victims to the disease than those infants which have been nourished in the proper way.

9. When the infant is four months old, then with the milk, which is yet the principal nourishment, soups made from crackers, bread, farina, wheat or rice flour, milk or thin beef tea, should be given.

10. Only when the infants have all their teeth can they take part in eating with the grown people from their table.

11. The practice of giving the baby something in the mouth to suckle on, for the purpose of making it quiet, is unhealthy and should be abandoned.

12. The infant should, as often as possible (in winter, too, when the weather is mild) be carried in the open air and should be bathed during the first three months of its life five minutes daily, later on two or three times each week, in warm water of 93° Fahrenheit (27° R.) The room where the infant stays must be ventilated frequently.

Mothers use for their infants a great many artificial food preparations, patented and not patented articles, of which we know very little. The above simple prescriptions are easily carried out. Milk, barley and the other articles are in good quality for sale everywhere. The mothers know here what they give to their babies, and may easily regulate the diet of their infants by following the rules above enumerated.

THE PHYSICIAN AS A SANITARIAN—HIS PAST AND PRESENT WORK —THE THREATENING ASPECT OF CHOLERA AND SMALL-POX.

BY N. N. SHIPMAN, M. D., SEYMOUR, IND.

Of the many agencies employed by the Almighty in former times for the destruction of human life, disease and pestilence stand, perhaps, first in order. God does not, however, always send these calamities upon us because of our wickedness, as some have supposed, but has caused them to follow, as a necessary sequence, the neglect or violation of certain laws that were ordained in mercy for our good only.

He has endowed us with capabilities almost limitless, and has provided us with the means for obtaining knowledge that are as boundless as the universe itself.

If we improve well the talents thus given us, and avail ourselves of all the means thus afforded for gaining knowledge, we bring about the only conditions that can make us useful, prosperous and happy.

If, upon the other hand, we neglect all of these things, we degenerate into barbarism at once, or fall into a condition very little above the savage. The distinguishing characteristics of all civilized nations are their high state of mental, moral and physical culture; and each succeeding generation should grow wiser and better, and healthier than all of its predecessors, because it has all of their knowledge and experience in addition to its own.

The physician should not be held responsible for the mental and moral culture of his race, but he certainly should be held responsible to a certain extent for the health of his race, and he will receive from the people praise or condemnation in proportion as he does, or fails to do, his duty. The advanced position in medical and sanitary knowledge that we occupy to-day has been reached only by long years of patient toil and sacrifice upon the part of the medical profession, and to the fathers in medicine, though crude in many of their notions, are we indebted for the foundation stones of solid facts upon which this advanced position rests. We are not therefore to "despise the day of small things," nor are we to be satisfied with our present state of knowledge. While much has been done towards alleviating human suffering, there remains very much yet to be done, and we that have been called to fill the places so nobly filled by our fathers would prove recreant to our trusts were we to ignore the obligations that are upon us, and let our lives pass dreamily away without even making the slightest effort towards furnishing our modicum to the common fund of general and scientific knowledge. If we have no higher aim or loftier ambition in our professional life than that of making money, we degrade our manhood, and bring dishonor upon the noble profession that has hitherto honored us with a place among its members.

The medical profession, above all other professions, trades or business, has the distinguished honor of being considered the most self-sacrificing in its labors. It has always been, and is to-day, engaged in efforts to prevent the very conditions that first called it into existence, and upon which it depends now for material support. What an exalted position then the true physician occupies among his fellowmen, the one great absorbing thought of his life to do good to others. Not until within a comparatively short time have the physicians' efforts been directed to prophylactic or preventive treatment. While a knowledge of diseases and the means for their relief are attainments not to be despised, the possession of a knowledge which clothes us with the power to ward off or prevent disease is far more to be desired, and is destined to work a wonderful revolution in the field of sanitary science.

Into this new field we are just beginning to enter, and our progress will depend upon the amount of energy we put forth and the unanimity with which men of science everywhere take hold of the work. Many false theories and notions will necessarily come up in the investigation of this subject, but will eventually go down under the superior light of progressive thought.

In the Divine economy we are taught to "sow in the morn thy seed and at eve withhold not thy hand, not knowing which shall thrive, the early or the later sown." So, in the economy of scientific investigation, we are to work early and late, hoping that in after years, when our life-work shall be summed up and other minds are engaged in the same line of thought, some grains of wisdom may be found among the superabundance of chaff that will serve as a starting point, from which may be evolved valuable scientific truths.

False premises lead inevitably to false conclusions. So, unreliable data are valueless in working out scientific problems. I speak of these things to show how utterly hopeless would be our efforts in any great undertaking if we had not the knowledge and experience of those who have gone before us. They lived for us and we have in a great measure reaped the fruit of their labors.

Should we not also labor for those who shall come after us? I think so, most assuredly. Let us then, as true physicians, work in harmony together, and with the unity of purpose which characterized their efforts, seek to cultivate a spirit of friendly emulation, that we may by and by be able to set forth in the clearest light possible a system of sanitary government that shall compel the people to acquiesce in its wisdom and acknowledge its worth.

This may not be done in one year or two, nor even in ten, but it can be done in the coming years. Persevering effort toward the accomplishment of any object can not fail in the end to meet with complete success.

Thus far I have spoken in a general way of the physician as a healer of diseases. I shall now speak briefly of him as the conservator of the public health. I think that I may truthfully say that all diseases having their origin in ferment, or those diseases known as zymotic, may be classed among the preventable diseases, and it is this class that should claim our most earnest attention at present, and to the physician the people turn instinctively for instruction. His work in the future therefore, will tend largely towards educating the people up to a higher appreciation of the blessings of health, and toward a preventive instead of a curative treat, ment. I need not stop to speak of the advantages a well-matured system of hygienic rules would bring with their adoption and enforcement, for they are apparent to almost everyone. The great object to be accomplished is to get the people everywhere fully aroused as to the importance of the work, and let there be a hearty coöperation between the profession and the people, enlisting the very best citizens in every city, town and community in the State and organizing them into local sanitary societies, to be governed by and subject to the already existing State Board of Health. To be eminently successful there must be singleness of purpose, unity of action, vigor in prosecuting the work, and untiring zeal.

Much of the pioneer work will necessarily fall to the lot of the physician. It is expected of him, as of no other class, that he give his time and his talents for the good of the people, and that, too, without the least hope of a pecuniary reward. No class, however, is more ready or willing to make sacrifices for the public good. While a great deal of the labor can be performed without money, it can not all. There must be either legislative appropriation or private contributions to carry out successfully this great sanitary work.

Before closing this paper, I wish to call attention to a danger that is now threatening the people of this country, and made all the more dangerous by our manifest indifference.

In matters of business we, as a general thing, are wide awake, and go ahead of all other nations in our efforts to excel, but in regard to our health we are the most careless and most negligent people in the world. Why is it? And why is it necessary that we should be constantly calling the attention of the authorities to their duty in this regard? No reasonable answer can be given. There is but one solution to the question, and that is found in the teachings of the wise man. Solomon says: "A prudent man foreseeth the evil and hideth himself, but the simple pass on and are punished." We occupy the position of the simple, and, like him, will most assuredly receive the punishment due our neglect.

It is a self-evident proposition that we can not fully appreciate anything of which we have always had an abundance or of which we have never been denied possession. For instance, the rich do not appreciate the blessings of plenty, because their wants have always been supplied. We, as a people, do not appreciate the blessings of liberty, because we have never felt the galling yoke of slavery. Those who have always enjoyed the blessing of health can not appreciate the condition of the poor, unfortunate invalid, who never feels entirely free from aches and pains. So, you will readily see that to properly appreciate a thing the person or people must necessarily, some time or other, have felt its need. We, as a people, have enjoyed all of these blessings in a marked degree—*wealth*, *health* and *freedom*—but we have been in their possession so long that we have become proud, boastful and exceedingly careless. This is dangerous ground to occupy, and we are standing upon it to-day. A terrible disease, known as Asiatic cholera, has been raging for more than two years in portions of Europe, attended with a fatality almost unprecedented in the history of epidemics, and it is rapidly approaching this country every day; and yet we are doing little, if anything, to stay its progress or meet it with anything like the preparation its gravity and importance demand, and before we are aware it will be upon us with all of its fearful consequences. And who shall be able to comprehend its terrible results, or number its victims when once it establishes a foothold upon our shores!

It will require the utmost vigilance upon the part of our National Board of Health to prevent its entrance into our country, and should it, in opposition to every precaution, gain an entrance here, our present State and local boards of health, cramped as they are for want of adequate means to prosecute their work, would be left almost powerless to prevent its rapid and complete dissemination throughout the land. The great distance that lies between us and the recently-stricken cities of Marseilles and Toulon should not lull us into a fancied security, nor cause us to relax our efforts for one moment in preparations to meet the plague. Our whole country, from ocean to ocean, should at once be put into the best possible sanitary condition that money and labor can secure.

Again, we are threatened with a more loathesome disease than cholera, and one, too, when it breaks out in the rural districts, is none the less fatal in its results or difficult to control, and its close proximity to our shores makes it all the more apprehensive and alarming. Yet we manifest a carelessness in the matter that is little less than criminal in its nature, and a disregard for our health that is culpable in the extreme.

If we are to judge the future by the past, it is not unlikely that we shall just go on, as we have gone on before, little heeding the timely and ample warnings that come to us every day and upon every hand, until the foul, pestilential atmosphere of contagion is blown hot in our face, and we are startled and become almost panic-stricken to find ourselves engaged in a hand-to-hand conflict with a disease between which and death there is but little choice.

THE SANITARY CONDITIONS AND NECESSITIES OF SCHOOL-HOUSES AND SCHOOL LIFE.

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PRELIMINARY OBSERVATIONS.

The problem submitted for consideration is to map out the wisest method of cultivating the mind in the rapidly developing body of youth, and meanwhile maintaining mind and body each in its best estate. Best estate for mind or body in this relation is not the exceptional condition that may be attained for either under special culture of one only, without regard to the other. Success must be measured by a standard that rests on the full recognition of the claim of the physical and mental organization of youth to the equal fostering care and attention of those who devise the methods of school-life, as well as of those who execute these methods.

There is a robust, enduring hardihood of physical development met with in the uncultured frontier or mountain-grown youth of both sexes, and a temporary physical vigor in the trained male athlete or wrestler that can not be rivalled in the youth of a dense population obtaining an education in the common schools of such a community. And so, too, there is an amplitude of mental culture in the youth who have been instructed by teachers, the number of whose pupils was always within the limit that permitted the teacher to study individual characteristics of pupils, and adapt instruction to the peculiarities of each, that can not be attained in the common schools.

Common schools are institutions found only in relatively dense and enlightened populations, where the wealth of the majority is below the mean that will sustain private schools in their best development, and where diverse church organizations are so multiplied that parochial or denominational schools can not be maintained.

It is under such circumstances that a wise and patriotic humanity establishes and maintains the common schools for the general welfare at the public expense.

Among a people whose national government is republican, where every citizen may aspire to every political position that can be occupied by any citizen, there is an especial virtue in having schools conducted at the public expense, open under equal regulations to all the youth of the community. Such institutions are valuable means of efficiently inculcating and permanently invigorating in every attendant a sense of the equality before the law of all citizens, and this is a sentiment that must be held and felt by every enlightened, progressive people capable of maintaing a true republican government. All free people maintain their freedom through knowledge of their natural rights, and in so far as such a knowledge is a part of legitimate school instruction and training, it is best imparted and received in common schools open to all classes on equal terms.

CORPOREAL DEVELOPMENT.

Nutritious food, comfortable clothing, appropriate exercise and good air are the cardinal factors in the healthy, symmetrical development of the human frame.

Food.—Food proper for pupils of the common schools does not differ materially from food proper for persons of the same age and condition engaged in other pursuits, but accounting the years between six and twenty-one as the school age, there should be recognized a difference in the food appropriate for the beginning of this period from that best suited to its closing years, as well as a difference in the food for the period taken as a whole, from that best adapted for either infancy or old age.

At the age of six, a child is apt to be content with such palatable and nutritious food as it has been accustomed to, and while habit has much influence in producing this result, the statement is intended to be equivalent to a pointed declaration that the parents are largely responsible for the correct or vicious appetite of such child. Parents who have intelligently used their opportunities for observation have learned that a child who has had liberty of variety and quantity in food of proper quality and suitable preparation, will eat what he wants with a relish and quit at enough with satisfaction, and on the contrary, a child who has been denied variety or stinted in quantity will, when opportunity offers, indulge his appetite to a mischievous extent. Hence the responsibility of parents for the appetite of their child when he arrives at school age.

Cereals in plain preparation; flesh, including fish, judiciously cooked; the common vegetables properly dressed; fruits ripe and sound are all suitable for this age, and while they should be brought to the table in savory condition, such as need them with proper condiments, none of them should be seasoned with sharp spices nor stimulating flavors, and this for the dual purpose of not creating a morbid excitement in the stomach in the present, and of avoiding the chance of inducing a dangerous appetite for other and more injurious stimulants in the future. Water and milk should constitute the beaverages, coffee and tea are never necessities, and are frequently harmful. In short, the diet at this period of life, drawn from all the ordinary resources for food, should be varied, attractive, palatable and nutritious, but neither rich nor exciting.

As the age advances, more latitude in deciding the character of the edibles is permissible to the youth, and at twenty-one he may be placed on his own responsibility in this behalf to the same extent that he is in other responsibilities of his fresh majority.

Modern investigators have made long strides in the understanding of the ultimate composition of foods, tending to the more thorough scientific appreciation of the value of many articles whose qualities have not yet been exhaustively pursued. These studies will presently, doubtless, be available for a more profitable classification of foods, such as will enable us to select with more exactness the particular things and the precise quantities that will subserve the demand of individuals of different needs and under various conditions.

But while science has gone far into the mysterious changes that occur in foods in their metamorphosis into the tissues of the body and then into excretions from the body, it still has not gone far enough, other than in a general way, to point out what food will best suit any individual of school age for corporeal development. For the particular articles of nutrition, each individal must be guided by his instinctive taste and appetite, and for his most favorable advancement, the youth may safely rely on his natural taste, appetite and desire in the selection of his food, provided he has proper quality and ample quantity to select from, and his taste, appetite and desire have not been vitiated by fashion, habit or erroneous training.

Clothing.—Clothing is a necessity to protect the wearer against meteorological discomforts—high temperature in summer, low temperature in winter and rain and snow in their season—and for modesty's sake. This for all classes of people, but fashionable society gives to dress the highest consideration, making it the vehicle for ornate display and the exhibition of wealth, but these non-essential uses of dress should be sedulously discarded from school life where the guiding principle should be protection to the person, neatness and cleanliness and such conformity to the prevailing school style as not to attract attention on account of material, cut or color.

Assuming that the demands of modesty are met by covering the body below the neck, any raiment that will satisfy the other requirements will answer for this demand. In summer the lightest garments that will shade the skin are suitable, and the material best adapted for them is cotton. Under a temperature of 75° F. the clothing must be more substantial, and its quality, of slow conduction of the animal heat, must be enhanced by changing the material, increasing the thickness of the fabric or multiplying the number of garments worn one over another. In winter the principal garments should be of wool. There is, possibly, room for a question whether in ordinary domestic life it is best to wear woolen fabrics next the skin, but the practice is so nearly universal, and the evils that arise therefrom so rarely recognized, and the theoretical good attaching thereto so faithfully believed in, that it is not now and here profitable to discuss the point as a practical issue.

We must keep in view that our clothing has nothing to do with creating the heat of our bodies; its function as a warming device is to prevent the too rapid dissipation of the natural heat of the body. This natural temperature (98.6° F.) must be closely maintained or the suffering will be great, and a few degrees, say 8° above or below it, will speedily be fatal.

All persons do not require the same amount of clothing to maintain this normal temperature under the same circumstances, depending on personal peculiarities; nor does the same person at all times require the same protection by clothing from the same temperature and similar surroundings, depending on the state of health or other accidental and temporary condition. It is of prime importance that these constitutional differences and changeable conditions of pupils in common schools be recognized by both parents and teachers, otherwise avoidable suffering might pass without attention.

Perhaps, as a rule, the children of well-to-do parents are dressed too warmly in winter. There is an idea widely prevalent that, while insufficient clothing of the school youth is detrimental, exposing them to colds and other disorders, there is no menace to health in an excess of clothing. It is safe to say that when food is ample and exercise free, more mischief is done by over-dressing than by under-dressing. It is a physiological law that when the human body is so protected that its natural power of resistance to low temperature is not called forth, such power of resistance becomes enfeebled, and when by accident or otherwise the body is exposed, the individual sufferers some derangement of health. Dressing too warmly has the same deteriorating influence on physical vigor as living in over-heated houses.

Clothing should be adapted to the season, and, also, within reasonable limits, to the variations of the season, as well as to the activity and exposure of the wearer.

It is better sanitary management to add top coats or wraps when going into the cold than to retain in the warm room the clothing that was suitable for promenade in the cold exterior.

In the consideration of clothing it is indispensable that habit have thought. It is a maxim that habit is a second nature, and habit in dress is as potent as in other departments of human affairs. By culture, intentional or fortuitous, youth may be trained to tolerance of wide differences in the amount of protection afforded by dress without invasion of their comfort or injury to their health. If two pupils of a common school, of equal development and similar sanitary condition, were to make a complete exchange of garments after one of them had become accustomed to clothing barely within the pale of sufficiency to protect him in health, and the other accustomed to clothing so warm as to be on the verge of tolerance within hygienic limits, each would be the victim of much distress, if not positive illness, and this solely because of the sudden and extensive alteration of an established habit.

Accepting this idea of the influence of habit in dress, the importance of regulating the clothing of those who can command what they desire by an intelligent estimate of what is best is obvious, because a wrong habit, once established, works evil continuously, and to overcome it and reinstate the right is a work of difficulty requiring discretion, perseverance and time.

Exercise.—That exercise is indispensable to corporeal development in the human family is as fully recognized as that it is a necessity of all the ordinary animals around us. And the playfulness of the young of all such animals, and their almost constant motion in waking hours, is the sufficient proof of this necessity.

The nature and extent of exercise varies instinctively with the age of the human young, and it is a marvel to observe what expedients in early years they will devise to obtain desirable exercise when their liberty in this behalf is restrained or circumscribed.

Youth, of school age, should be allowed opportunity for such exercise as the individual may select, under the general supervision of the parent; and the parent should bear in mind constantly the physiological law that the fatigue, from which youth speedily and fully recover, is invigorating, and that the play of children is not apt to be carried beyond this degree of fatigue, except under undue excitement. The apprehensive affection that sometimes interposes parental authority to arrest the earnest pastimes of children frequently overreaches itself, in that the earnest but innocent pastimes arrested by the parent's presence break out with redoubled vigor in the parent's absence, because of the enforced suspension, and becomes so intense as to accomplish the mischief apprehended, but which would not have occurred if the natural order and activity of the recreation had suffered no interference.

Utilitarians have sometimes advanced the idea that if the physical energy expended by a boy in a game of ball, or a girl, in jumping the rope, were devoted to the production of food or clothing, or other thing having a market value, its service to physical development would be as great. But this is an erroneous idea. In the first place, the mental conditions accompanying the two phases of activity are usually widely different, and this difference, so far as it affects corporeal development, is all in favor of playing ball and skipping the rope; and in the second place the activity for amusement is usually adapted to bring into alternate play various associations of muscles until all are exercised, and thus improved in development, while in productive activity but a limited series of muscles are apt to be brought into action, and these, from over-work, are likely to have their resilience impaired, and their normal development impeded, and at the same time other muscles not called into action suffer in proper development from lack of appropriate exercise.

As the school age advances a larger and larger proportion of the physical energy of the youth may be directed to the performance of selected duties, so arranged as to be a valuable part of their education for the productive labors of part school life, and this, of course, signifies less time spent in purely amusement activity.

If the correctness of this reasoning be granted, the conclusion is plain that those in authority should allow much liberty to the youth of school age, in their instinctive selection of exercise, and the extent to which they may indulge in it, the authorities still holding, however, their prerogative, resting on their maturer reasoning and experience, to change any wrong direction of exercise that the indiscretion of youth might pursue, or excess that undue stimulation might impel.

Good Air.—Good air is the term intentionally used in preference to the more common one of pure air, for the reason that in nature there is no such thing as pure air, that is, an atmosphere composed of twenty-one parts of oxygen and seventy-nine parts of nitrogen. In the general atmosphere there is always carbonic acid and aqueous vapor, and frequently other gaseous substances, varying in number, character and quantity at different times and places, according to the environment.

Successful attention being given that nothing avoidable is left about a dwelling or school-house to vitiate the circumambient air, the next point to claim attention is that the air inside the building shall be as good as the air immediately surrounding it. To secure this it is requisite that no decaying matter, whether animal or vegetable, that generates carbonic acid or other deleterious emanations be permitted to remain indoors. Many organic substances are liable to decomposition, rapidly or slowly, in the presence of heat and moisture, and as a temperature of about 70° F. in living-rooms is essential to the welfare of human inmates, provision must be made that with this temperature and above there is nothing present in which to induce such decomposition as to be mischievous.

Aqueous vapor is always present in the atmosphere, but varies greatly from time to time in a given place, and the varying quantity is not, as a rule, detrimental to health if the vapor be not contaminated by other volatile matter which it may hold in solution or suspension. Perhaps there is scarcely an idea touching sanitary affairs more widely entertained than that damp atmosphere is dangerous to health. This opinion is not supported by either correct observation or scientific deduction.

From all living people there is constantly arising volatile matter that vitiates the air, and if the air be confined in a room, for example, where many persons are remaining, it soon becomes charged with these volatile matters to a degree incompatible with comfort, and will presently even destroy life. These volatile matters arise from the skin, and more largely from the lungs, which give off, with other constituents, certain animal matters in the expired air which orginate in the normal metamorphoses of the body, and if allowed to accumulate become a source of serious contamination of the air.

Carbonic acid is another ingredient in expired air, that if allowed to accumulate in a room will presently become dangerous. The carbonic acid in the general atmosphere is supplied from the burning of coal, wood and all things containing carbon, from the decomposition of all organic matter—this being, in fact, only another form of slow combustion—and from the respiration of living animals. But the carbonic acid from all these sources, immense as it is, is so small compared with the whole amount of atmospheric air, that when diffused therein it does not make an appreciable increase of carbonic acid in the general atmosphere. It is quite another affair, however, if in a room containing a number of living persons the air be confined and the carbonic acid of the respiration of these persons be retained therein. Under such circumstances the retention of the carbonic acid and associated animal matters soon produces a degree of oppression, then an intense sense of suffocation and, if continued, death.

From the serious evils arising from air surcharged with these animal matters and the carbonic acid, there is but one means of escape, and that is dilution and dispersion of the vitiated air, and such dilution and dispersion constitutes the whole service of ventilation. However much bad air there may be in a house when it is dispersed into and diluted by the whole outside atmosphere, it is no longer harmful. The devices for accomplishing this dilution and disperson will be considered when treating of the ventilation of school-houses in a subsequent chapter of this dissertation.

The conclusion arrived at, therefore, touching good air for corporeal development, is that due care being taken to avoid or remove all sources of contamination of the air outside the house, and then provide by appropriate ventilation—dilution and dispersion—that the air inside the house shall be as good as that outside the house.

Perhaps a word should be added concerning night air. Some persons entertain the idea that all night air is unwholesome and should be excluded from occupied houses. Night air is generally cooler than that of the day, and it may sometimes be agreeable on this account to prevent such currents through the house at night as would be desirable during the day, and where a house is liable to a temporary night invasion of malaria, borne on currents from proximate sources, it may be prudent to shut out the offending effluvia, but it is not possible to exclude night air entirely, and, as a rule, the air of an unoccupied house having no internal source of contamination, will be the same as the external air, and if occupied, there will be added the injurious emanations from the occupants, so that however bad the external may be, it will only be made worse if confined in an occupied house, and in such case the necessity of dilution and dispersion is the same for the night as for the day.

Associated with the subject of good air is the matter of cleanliness of person and apparrel. There is an uncleanness that may affect the subject of it through the skin, but within the purview of the present pursuit it may be assumed that the offensiveness of promiscuous dirt, as well as of personal excretions and emanations adhering to the skin, or absorbed and retained by the clothing, is chiefly manifest by their exhalations into the atmosphere, and, therefore, to be treated and disposed of as are other things that contaminate good air.

MENTAL DEVELOPMENT.

If the body is fairly developing, the mind will at the same time also expand in some direction. It is the true service of school training and school teaching to lead this mental expansion in such direction as to insure to the adult individual the most valuable capacity for all proper purposes of life.

The concept of common school education is that it should store the mind with such elementary knowledge that if the subject of it immediately enter upon one of the ordinary industries of life, his mind shall have had such instruction as to qualify him to begin the special training required for his future career, whether that is to be a farmer, a mechanic or a clerk; and if he elect one of the professions for a vocation, he will be equally well equipped for entering upon the special studies demanded. For all these purposes the same elementary instruction is needed, and so far as this universal educational need extends the common schools should go under the control and at the expense of the commonwealth. Beyond this point school education becomes special, is asked for and availed of, in fact can be accepted by a part only of the rising generation, and is, therefore, in a republic, not justly a claim on the general educational organization supported by the public funds.

This broad proposition will be accepted, perhaps, by all who are inspired by a true patriotism; but there is ground for wide and honest differences in the conception of the limit that should be fixed for the education that is essential to the welfare of the people of a State as a whole. No philosopher, statesman nor educator has treated this point so as to secure universal approbation. The more prevalent idea appears to be that the higher and more extended the school education can be conducted the better for the purity, patriotism and happiness of the subject of it. Without discussing the soundness of this view, it would seem safe to suggest in the matter of education, that in so far as all are substantially agreed as to what is essential to all citizens in common to enable them to discharge their obligations to themselves, to their families, to the community and to the State, should be provided by public authority and at public expense.

This conclusion rests upon the dual proposition that there is some amount of school education necessary to fit every person for his ordinary duties among a free and enlightened people, and that there are some persons who are not pecuniarily able to secure such education. The obligation, therefore, of the public to provide this education is quite similar to that to provide for the public peace and protection, to establish and maintain highways, to keep open waterways and to guard and maintain generally the public welfare.

SCHOOL-HOUSES AND SURROUNDINGS.

It is a self-evident proposition that youth who grow up in the midst of order, tidiness, and a general prevalence of neatness and attention to minor matters, will have their maturer years bettered by the impression that these conditions have made upon them, and their subsequent life will be in some measure favorably modified by such impressions.

A school-house and its surroundings should, therefore, be kept in order for the educational influence of order; inclosures in good repair, yards kept free from litter and waste, outhouses maintained clear of all avoidable offense, doors, windows and walls guarded from disfiguring scratches, marks and dirt, will prove a continuing lesson of instruction to the attendants—teachers and pupils—and will produce results that can not be hoped for where the inclosing fences are dilapidated, the yard neglected and strewn with litter, the outhouses filthy and offensive, and doors, windows and walls soiled, broken and scratched. Like begets like; the environment being neat, orderly and attractive, the pupils will be careful, obedient and attentive; the environment being gross, in disorder, and repulsive to correct taste, the pupils will be rude, unruly and negligent.

And it is not the grandeur nor the expensiveness of the school-house and its surroundings that make the valuable impressions on the attendants, but it is the evidences of good and intelligent care manifested in the preparation and maintenance of the premises that bring the best results. A grand school building, ornate and expensive, in disorder and showing neglect, calls forth no such agreeable feelings and exerts no such educational influence as an unpretentious building, plain and simple in its finish, but it, and all its surroundings, neat and in order, evincing a commendable economy in design and construction, intelligent taste in its supervision and judicious industry in its maintenance.

THE SCHOOL-HOUSE.

There are wide differences in size and other features of school houses adapted to the wants of the city, the village and the country; but certain requirements demanded for a school-room for ordinary instruction are much the same wherever the school-room may be situated.

These requirements are: Ample space, abundant light from the proper quarter, appropriate temperature, adequate ventilation, and suitable furniture.

Space.—Floor space should be fifteen square feet for each pupil, and the air space should be not less than one hundred and eighty cubic feet for each pupil. Each of these quantities admits of some variation corresponding to the age and size of the pupils, but practically, for construction of school-rooms, all ages of pupils may be counted the same. A room containing six hundred square feet of floor space would be the proper size for forty pupils aged sixteen years, but may be occupied by fifty pupils aged six years without mischievous crowding.

With fifteen square feet floor space, twelve feet to the ceiling, will yield one hundred and eighty cubic feet of air space for each pupil, but to secure the best light a higer ceiling is sometimes necessary, though fourteen feet should never be exceeded. Larger air space is not objectionable of itself. Warming and ventilating the room in winter, and economy, are the considerations that dictate the limit.

Light.—Light in proper quantity and quality is among the important needs of a school-room, and the right distribution of it demands equal consideration. It should be abundant, soft, steady, and without glare. Imperfection in these particulars causes the pupils to be restless, irritable and disorderly, creates headache, and produces defective vision that is apt to be permanent.

The direction in which the light reaches the pupil is also important. If it come directly in front, striking the eyes, it obscures the thing looked at, and induces painful efforts to adjust the apparatus of accommodation; if it come from behind, the shadow of the pupil falls on the table of his desk and obscures vision there; and if it come from the right side, the hand in use on the table, with anything held in it, will make an objectionable shadow. This leaves only the left side for the admission of light, and when all the light is to be admitted from one side the left side should be adopted. When there are facilities for admitting light from both left and right sides, that is possibly best, but, for reasons that will appear further along, such an arrangement is only practicable in the rooms of small school-houses.

The point of the compass from which light should enter the school room is not without significance. Having exclusive regard for the service of the eyes, a light from the north is best. It is clear, soft and regular and without glare, though in short, dark winter days scant; while that from the east is subject to the glare and excessive light of the long slanting rays of the morning sun and sometimes, at least, of obscurity in the afternoon; and from the west the objections are reversed, morning light being sometimes obscure and the afternoon too bright and glaring. From the south there is at all times during the school day the fullest measure of light, and in the winter when the sky is clear the sun sends his rays far into the room at a period when sunshine is scarce and can not be enjoyed out of doors on account of the cold, and it is just the time when the sanatary influence of a sun-bathed room is at its highest. The glare of the direct rays of the sun is objectionable, but as this can be modified by curtains and shades more easily for a south than for an east or a west sun, and the sanitary value of a winter sun in a school room is such as to force the conclusion that a school room for winter occupancy should be lighted through south windows. In summer the sun is so nearly vertical that his rays do not penetrate through the south windows into the room sufficiently to make the south light objectionable on that account.

The amount of light needed in a room depends largely on the method of its introduction and the interior finish of the room. It has been laid down by excellent authority that the window capacity of a school room should equal one-fourth the floor space. But light coming from the rear of the pupil into a room with dark walls and ceiling, will not be as good as one-half the quantity entering from the left into a room with white ceiling and mild tinted sides, and this should always be the finish of ceiling and sides. Light properly admitted and distributed through windows equal in extent to one-seventh of the floor space of a school room will generally be adequate, but more window space will be desirable on some days of obscure external light.

Windows should start from about thirty inches above the floor—that is, the hight of the pupils' desks—and extend as near to the ceiling as proper construction will admit—and this to light the farther side of the room—and they should be grouped so that all will be located in the part of the wall that corresponds to the part of the floor occupied by the desks. Their number and width should be such as to afford the requisite amount of light.

Temperature.—Temperature and ventilation of school rooms are so intimately associated that they are judiciously treated together.

In summer the temperature is modified, as far as may be, by open windows and doors, and need not be considered here, and in autumn, winter and spring while artificial heat is needed it should be maintained at about 70° F., two or three degrees below 70° being preferable to two or three degrees above 70°. The temperature should always be ascertained by a thermometer, as the sensations of neither teachers nor pupils are ever reliable in this behalf, and the thermometer for this purpose should be about five feet from the floor hanging clear of outside walls.

School rooms should not be warmed by direct radiation from stoves or other apparatus. It will be shown presently that it does not offer opportunity for ventilation, and, furthermore, it is not possible to warm all parts of the room equally. If the pupils near the stove are only comfortably warm, those in remote corners of the room will suffer from cold, and, on the other hand, if pupils in remote corners are comfortably warm those near the stove will suffer from excess of heat. And, moreover, dangerous currents of cold air can not be avoided unless the room be close enough to make the lack of ventilation still more dangerous.

Ventilation.—As already intimated the ventilation when the external temperature is 70° or above is to be regulated principally through the adjustment of windows and doors, but when the external air is below 60° school-rooms need to be artificially warmed, and for this purpose must be closed, and it is in the arrangement of the heating apparatus that ventilation is to be provided.

It is important that those planning and managing the warming and ventilating of school-rooms should bear constantly in mind a few cardinal principles in the movement of air currents:

1. That the air will only ascend in a chimney or ventilating flue when it is in some way made warmer than the external atmosphere.

2. That heated air in a room will always rise to the ceiling and carry with it all volatile matter caught in its current.

3. That by the law of the diffusion of gases the air in an occupied school-room, if not renewed from outside, will soon be equally impure in all parts of the room, there being no such thing, as seems sometimes to be imagined, as carbonic acid settling to the floor, however true it may be that carbonic acid will remain at the bottom of a cool well or mine where it originated if the superimposed air be still.

4. That though the ceiling be air-tight and no air escape, if the ceiling be thin, a good conductor of heat, and there be a low temperature on its upper surface, the impinging hot air will be rapidly cooled without being purified.

5. That thin walls will cool the air of a school-room if low temperature exist on the outer side, and so will ordinary windows independent of leakage through crevices, and that along the walls and still more actively along the windows there will be a current of cold air downward to the floor.

6. That an air space, even a thin one, in a wall or window, as in a hollow wall or a double glazed window, will add immensly to the protection against external cold.

7. That cold air is not necessarily good air, and hot air not necessarily bad air. Cold retards decomposition of organic matter and warmth favors it, so that warm air in contact with effete or non-vital organic matter is more likely to be contaminated under similar circumstances that cold air; but that is all.

School-room air is contaminated by the exhalation of certain animal matters and carbonic acid from the lungs of the occupants, and emanations from their bodies and clothing. From each of these sources deleterious matters mingle with the air, but by giving attention to the presence of carbonic acid and keeping it down to a harmless point all the other offensive ingredients are, by the same means, diluted and dispersed into innocence at the same time. Attention may, therefore, for present practical purpose, be confined to carbonic acid, not because it is worse than others, for in fact it is not so bad, but for the reason that in a school-room it bears so nearly a constant relationship to the other deleterious emanations that by ascertaining the amount of it present a fair estimate of the quantity of the others may be made, and it can be quite readily approximately measured while the others are exceedingly difficult to measure.

Carbonic acid exists in the general atmosphere in varying proportions, averaging about 4 parts in 10,000, and in this quantity is not recognized by our senses, and is not noxious. In truth, many times this amount may be present, and if the atmosphere contain no other deleterious contamination, the carbonic acid will do no harm to human beings.

When the quantity in a school-room is increased to 6 parts in 10,000, there is a slight sense of mustiness and oppression to one coming in from the fresh air; if the amount increases to 8 parts in 10,000, the air becomes stokey and of unpleasant odor to the inmates; and if the proportion reaches 10 parts in 10,000, the air is heavy and offensive, producing headache and other unpleasant symptoms.

Ventilation of school-rooms should, accordingly, be so successful as to keep the proportion of carbonic acid at 6 or less parts in 10,000 of the contained air, and never permit it to exceed 7 parts. A school-room 24x30x14 feet will contain 10,000 cubic feet of air. If in a room of this capacity, with 4 parts of carbonic acid in 10,000 of air, there be placed forty pupils, there would be an increase of carbonic acid at the end of the first hour to 6.5 parts in 10,000; at the end of the second hour to 9 parts, and at the end of the third hour to 11.5 parts in 10,000, all this supposing no fresh air to have been admitted, and of course no bad air to have escaped. In this hypothetical case the allowable maximum of carbonic acid would be reached at the end of the first hour. This serves to illustrate abstract truths of ventilation, but for practical purposes the picture is overdrawn, as there is no such thing as an air-tight school-room. No doors nor windows fit so closely but crevices are left through which air circulates, and through ordinary plastered walls, whether of wood or brick, there is constant passage of air.

The service of ventilation is to provide means for an exchange of air; to bring in the fresh air from the outside to replace the soiled air of the inside, which must be removed, and thus to dilute and disperse the air made noxious by the occupants. In badly constructed rooms this dilution and dispersion may take place through holes and cracks or other openings in the floor, walls and ceiling sufficient for ventilation, though such indefinite free circulation is incompatible with sufficient warmth in cold weather, but in well constructed school-rooms the external air must be delivered into the room warmed to a degree that the quantity required for ventilation will make the temperature suitable for the inmates. There are several ways of accomplishing this.

An efficient, and perhaps the simplest way, is to have a heater in the room into which the external air is conducted under and through an opening in the floor. The air thus warmed as it passes up through the heater ascends to the ceiling, and is thence distributed and diffused through the room with approximate evenness. The vitiated air is taken from the room at the floor and carried through conduits that are warmed by the smoke-pipe of the heater and discharged into the open air at the top of the building.

There is no direct radiation from such a heater, but a door in its casing may be so arranged that direct radiation into the room to a limited extent may be obtained if desirable, and by valves at the bottom of the casing, and in the cold air duct, the air of the room instead of the external air can pass through the heater and thus more speedily warm the room in the morning, or at other times when haste is demanded and the room unoccupied. This apparatus if properly constructed gives the teacher satisfactory control of both the heating and ventilating of the apartment.

Other methods of heating school-rooms are by furnaces, by steam heaters, and by hot water apparatus. All these heat the air before it is admitted to the room, but the principle of both heating and ventilating is the same as when the room has a heater within it.

A school-room 23x28x13 feet has a capacity of 8,372 cubic feet, and is appropriate for forty pupils. Allowing 1,800 cubic feet per hour for each pupil would require the admission of 72,000 cubic feet per hour of fresh air, and the corresponding amount of polluted air removed. An opening 12x12 inches will admit 72,000 cubic feet of air per hour, with a velocity of twenty feet per second. As heated air expands, the outlet for tainted air should be somewhat larger, say 12x13 inches, or the equivalent thereof.

Assuming that the warming is to be done by a heater in the room, the arrangement should be, to-wit: A tight tin conduit of proper size leading from a suitable opening in the outer wall under the floor to an opening under the heater. The heater is, say five feet high, from the top of which issues the heated air, so that neither its temperature nor velocity immediately affects the pupils. Rising in a direct current to the ceiling, the heated air spreads along it in all directions, pushing down the cooler air, which should find exit close to the floor near the teacher's platform into the hollow wall, or special conduit in the wall, in the rear of the teacher's platform. The outlet registers should be of ample dimensions, and so arranged as to be readily reached and manipulated by the teacher, for it is here that the influx and efflux of air is to be controlled, and the temperature of the room regulated. A tight room is a plenum, and only as much air can enter as is discharged, so that if the soiled air vent be opened wide a rapid outgo invites a rapid income of fresh air, and this passing rapidly through the heater is but slightly warmed; and, on the other hand, partially closing the vent slows the current through the heater, and the air is thus made warmer. All this service must be conducted so as not to reduce the influx of fresh air below the minimum for sanitary ventilation.

The smoke-pipe of the heater should enter its flue near the ceiling, and the flue should be a glazed, hard burned round or square tiling, or clay pipe, supported within a ventilating shaft, into which the foul air conduit discharges, and both to be continued above the top of the building.

The heater should be so constructed that by the use of valves the heating surface can be regulated to answer the demand of the moment by throwing the passing current of air into contact with less heating surface, and conveying increased heat into the smoke flue, thus enlarging the influx of air, and at a lower temperature.

It is not essential that the heater be placed in a corner near the teacher; nevertheless, for observation and attention, it is best so. And wherever placed, the ventilating devices must be arranged therewith to insure a heated ventilating shaft with the smoke flue.

Neither the smoke nor the ventilating flue of one room should have any connection with those of any other room. This is indispensible to insure successful heating and ventilation where heaters are used.

A school-house may consist of one or more rooms, the number and size of them, within certain limits, being dictated by the number of pupils to be accommodated.

In the country for the majority of places one room is all that is needed. In villages two rooms may be necessary, and where the population is large, as in cities, houses with four to eight rooms, and many of them will be required. When a sufficient number of sites are obtainable for separate buildings, all houses for common schools should be limited to eight rooms for general teaching, but may have superintendent's and principal's rooms and janitor's quarters in addition.

Houses with one or two rooms only should be one story without basement or cellar; with more than two rooms, two stories with basement or cellar for fuel or other proper purposes.

In adopting a location for school purposes proper regard should be had for appropriate space for the accessories of a school building. In country districts ample ground is easily attainable, and in cities sufficient room for all sanitary ends should be provided at whatever expense. Space for exercise or play at recess should be under observation from the teacher's lookout, usually the school-room windows; in proximity with this the pump or other source of supply of potable water, which should be abundant and as remote from the privies as convenient, and in no instance nearer than fifty feet. The privies should be placed on the most secluded part of the lot, not too far away, on the side of the house opposite the play ground, separate for the two sexes and absolutely private at the buildings themselves and the walks thereto, or as much so as practicable.

The site for all school-houses should be selected with regard to dryness of the situation, the facility of drainage and freedom from unpleasant surroundings. If the soil is not dry it should be underdrained, and if the spot for the building has not an elevation that directs surface drainage away from the immediate foundation of the building in all directions, it should be made so.

Foundations should be secured against avoidable humidity in all cases, and where without cellar, vegetable or other organic material should be removed from under the house if the soil contain much of it, and its place be supplied with gravel or sound earth if something be necessary to prevent the accumulation of water where the soil was removed.

Floors should be deadened and also made impervious to cold air and to emanations and moisture from beneath them, if such should chance to be present.

Walls may be constructed of a number of materials, but most likely of wood or brick, and in all parts of the Union north of the line of 40° of mean winter temperature should be multiple. If of wood, triple—an outside casing, an inside plastering, and an intermediate lining or double air-chambers, or filled in with brick or other appropriate material. If of brick, the outside walls should be double, with inclosed air-chamber, plastered against the solid brick. This is better and safer, and more durable than a solid brick wall, furred on the inside for plastering, with an air-space between, such furring affording facilities for rapid conflagration in case of fire, and such plastering suffering fracture from unavoidable accident or rough usage of pupils.

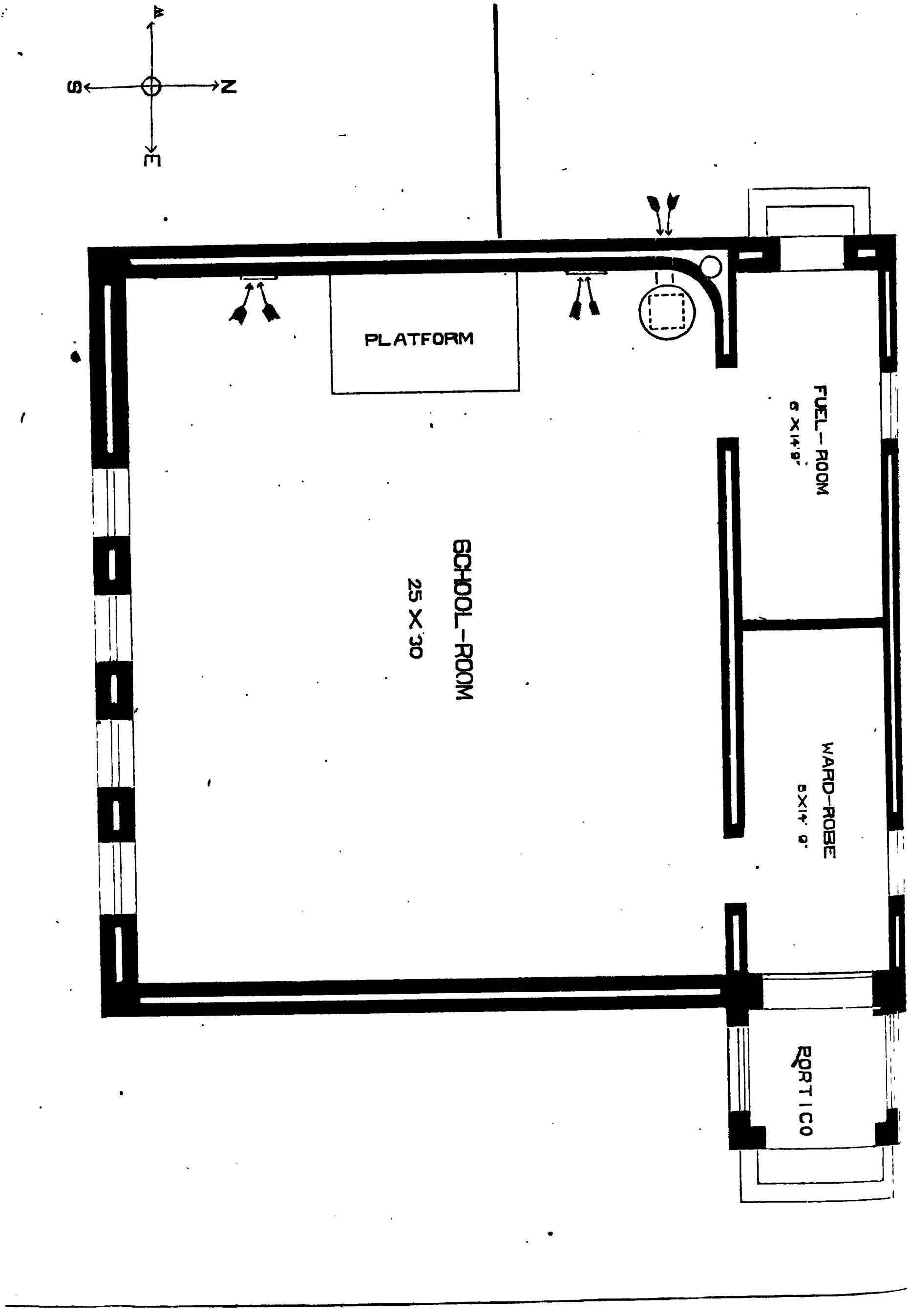
School-rooms should be not less than twelve nor more than fourteen feet from floor to ceiling, preferably twelve feet, all other things being equal.

Glass in south windows should be double thick or the windows should be double glazed, or, better, should have double sash, and in north windows double sash is almost indispensable. All windows should be accurately fitted and adjusted, so that they may be easily opened to any extent and readily maintained in any position. Ceilings should be as carefully constructed as floors, made double or treble, with intervening air-chambers and without flaw or crevice, with the intent to prevent the escape of warm air from the room or cooling without escape, just as floors are made sound to prevent the inlet of cold or tainted air from beneath.

In rural districts the building for fifty pupils should have its school-room 25x30 feet, and attached thereto should be an annex, with one apartment for a wardrobe and another for fuel. If the room be lighted from one side its length should extend east and west, the annex on the north side, with the entrance at the east or west end, as may best correspond with the approach of the pupils from the highway, and, wherever situated, should be protected by a vestibule or portico for convenience of pupils in stormy weather.

All doors of exit of all school-houses should open outward as security against disaster in the rush of possible panics.

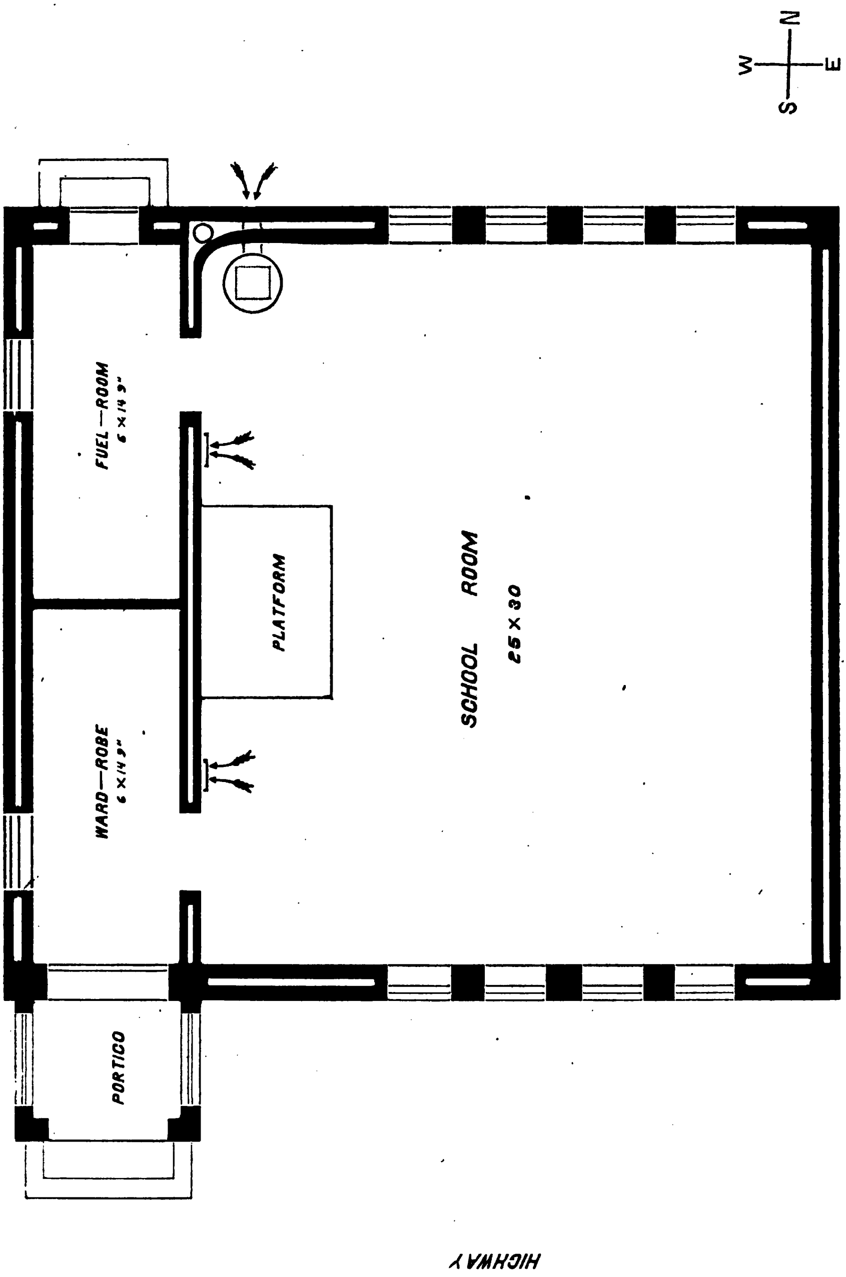
The teacher's platform, five feet deep by eight feet wide, at the west end of the room, and the heater in the northwest corner. Two doors in the north wall, one into the wardrobe the other into the fuel-room, and opposite each in the north wall of the annex a window for light and for summer ventilation. The desks will occupy the central part of the floor, leaving a space three feet wide all around the room between them and the wall and the teacher's platform. This will admit four rows each of eight single desks, and two rows each of nine, with passways twenty inches wide between them. Ceiling should be fourteen feet high to afford adequate light to the remote side of the room. Four windows, 3x11 feet, grouped in the south wall, opposite the area occupied by the desks. Plan No. 1 indicates such a school-house.


W
S
N
E
PLATFORM
FUEL-ROOM
6 X14'6"
SCHOOL-ROOM
25 X 30
WARD-ROBE
6X14' 6"
PORTICO
HIGHWAY

Plan No. 1.

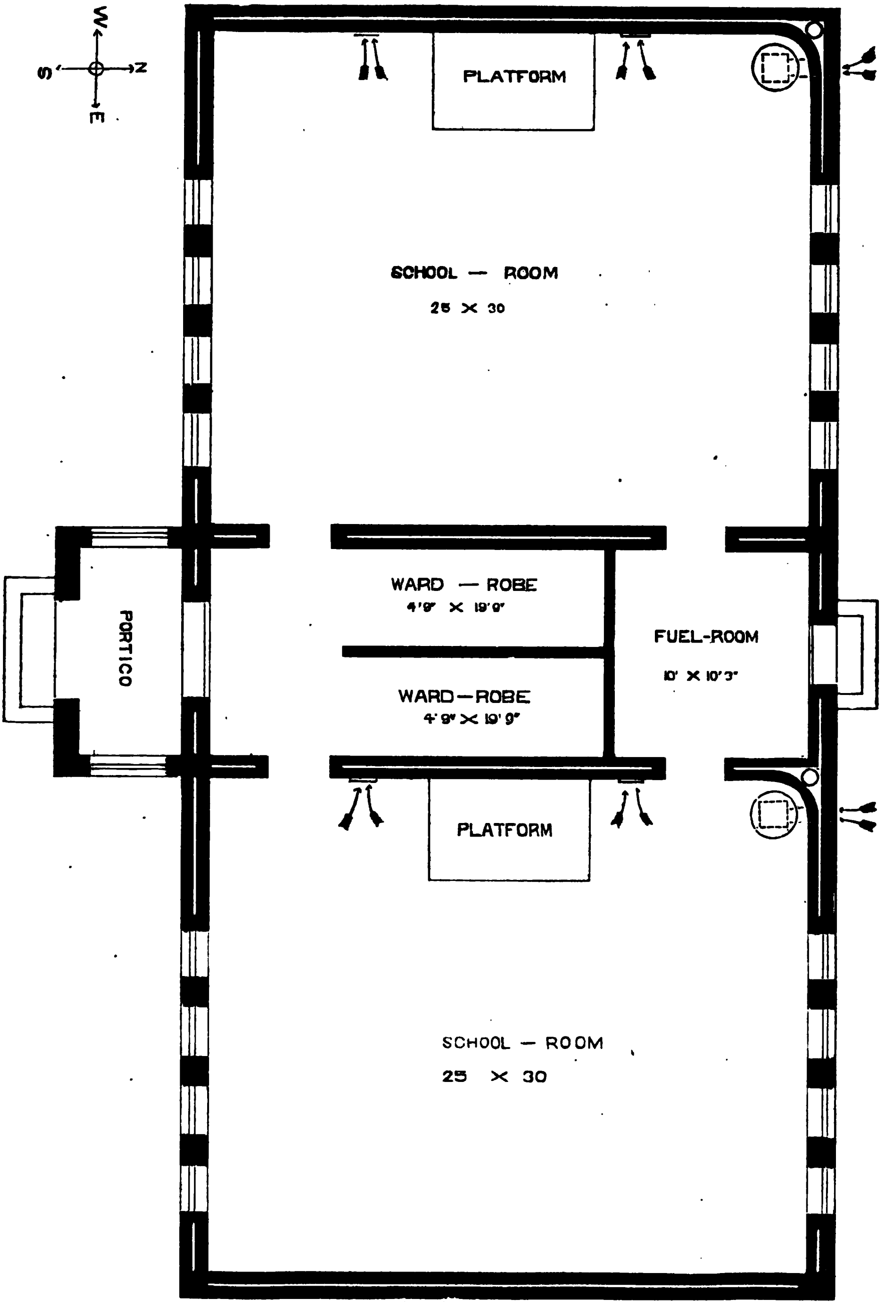
The annex may be at either the east or west side, but when otherwise satisfactory, should be placed at the north side as additional protection against cold in winter.

If the room be lighted from two sides its length should be from north to south, and the annex should be on the east or west side, according as best corresponds with the approach of the pupils from the highway, or the wardrobe may be at one side and the fuel-room at the other. The ceiling need be but twelve feet high, and the windows, four on the south and four on the north side, each 2½x7 feet, starting three feet from the floor, and grouped in each place to correspond with the area occupied by the desks. Plan No. 2 illustrates this arrangement of the room.



Plan No. 2.

If two rooms be required in the same building, an additional one may be attached to either of the foregoing plans on the east or west side, similar in arrangement to the original. Or the rooms may be separated by a hall from which each may be entered, and the hall may serve for wardrobes and fuel rooms for both. Plan No. 3 is one style of a two-room house.



Plan No. 3.

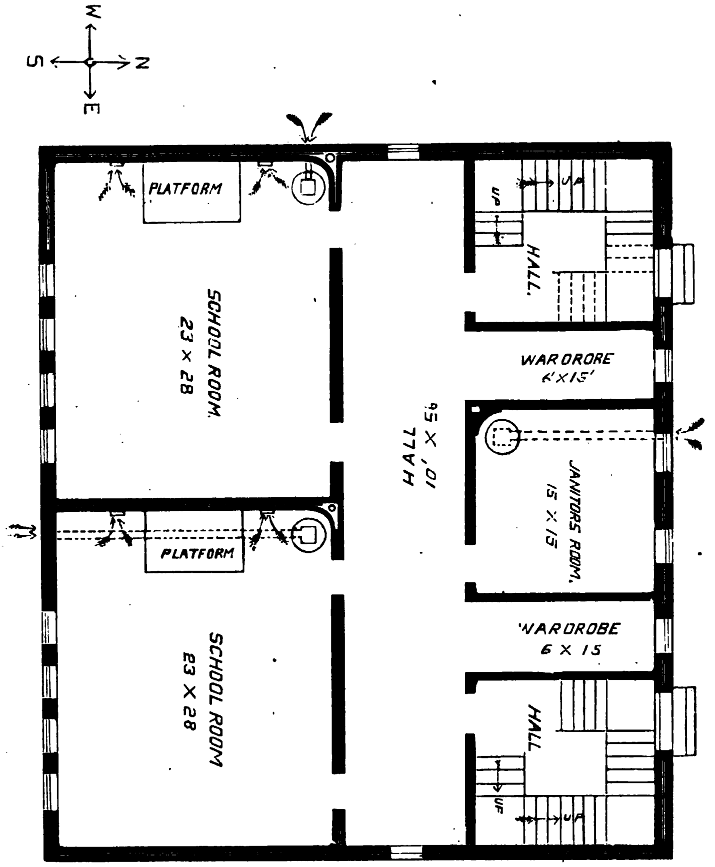
Where four rooms are to be provided, the building should be two stories, the rooms on the ground floor similar to either the first or second plan for a single-room building, and the upper ones exact copies of the lower. The annexes will require modification. The fuel apartment may be used for the stairs to the second story, and the fuel be stored in the cellar.

Usually in a four-room house a superintendent's or a principal's room and a janitor's quarters are needed in addition to the school-rooms, and the sanitation of the institution will be better served by a building constructed on a different plan from the foregoing. The school-rooms should be 23x28 feet, designed for forty pupils; ceiling, thirteen feet; four windows in the south wall 3x10 feet; heater in northwest corner; all arranged as described for the single room, with south windows only. On the north of the rooms a hall ten feet wide, and the full length of the building, for exercise in inclement weather, and on the north of the hall, at its center, an enclosure for a janitor's quarters below, and a principal's room above, each 15x15 feet. On each side of these rooms a wardrobe 6x15, and next to these entrance ways, 6x15, and then stairways, 8x15 feet. Stairsteps should be six inches rise and twelve inches tread, with square landings at the turns. The space designated is suitable for such stairs. The cellar stairs should be under those leading to the second story.

Principal's and janitor's rooms to be lighted with two ordinary windows, the wardrobes each with one, the entrance ways with transoms and glass beside the doors, the stairs with one window at the second landing, and the hall with large windows at each end.

Wardrobes should be left open into the hall for air and warmth, the entrance ways closed at both ends with doors, and the stairways closed so that each story has independent warmth and ventilation.

Principal's and janitor's rooms to be warmed by ordinary means, and the great halls to be heated by protected stoves, and ventilated from the floor by conduits carried up in connection with the flues of the stoves or the flues of the school-room heaters. This arrangement of a house is illustrated in Plan No. 4.

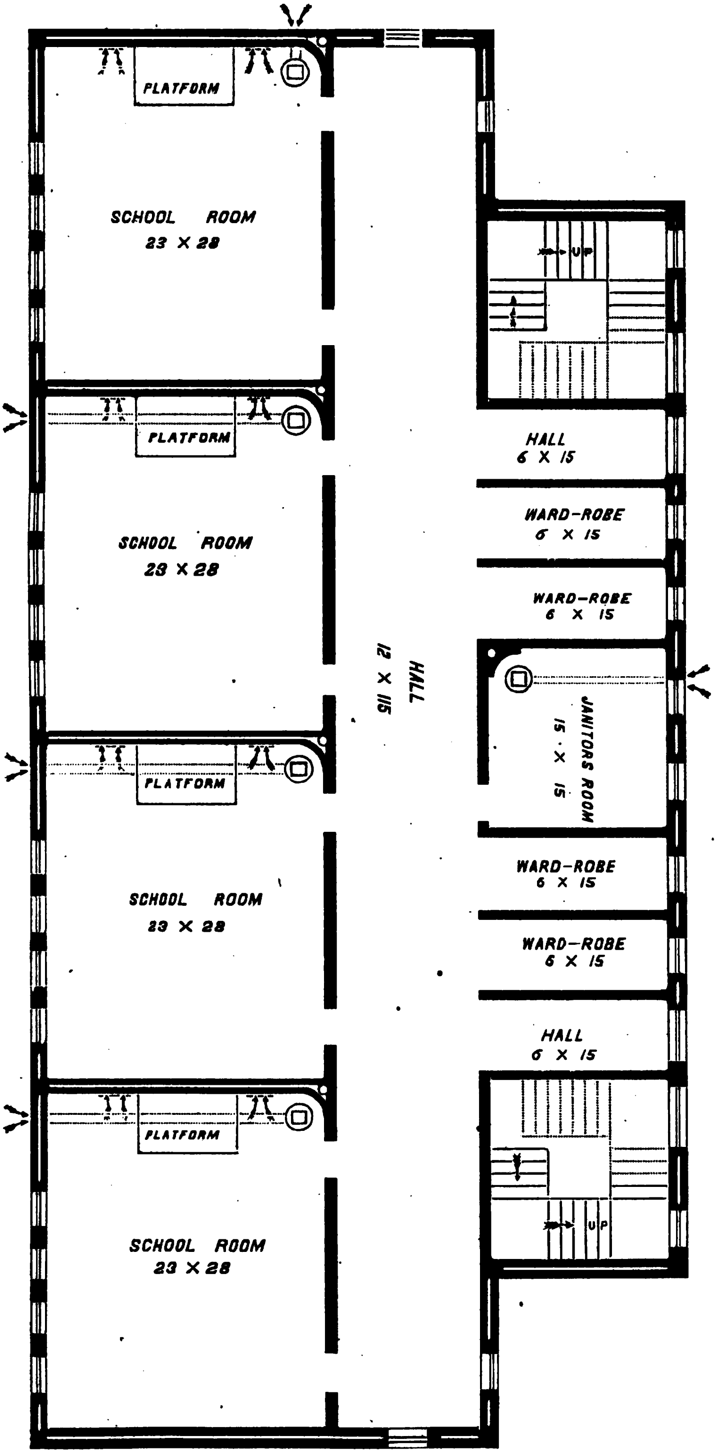


Plan No. 4.

It may be modified. All that part north of the hall may be dispensed with. The janitor's and principal's rooms may be omitted; the wardrobe for each room constructed on the west side of the room, increasing the length of the building to that extent; the entrance made directly into the lower hall, and the upper one reached by stairs in the halls, which would give the two halls a common communicating atmosphere, an objectionable feature on account of warming and ventilation. Or the entrance way may be made by a supplementary central hall from the south front to the main hall, in which may be placed the stairs leading to the upper floor and to the cellar. In all these modifications the size and other essential features of the school-rooms proper are maintained intact.

Where eight school-rooms must be supplied in the same building, they are each to be of the same dimensions and arrangement as those in the four room house, and the annex of the same general character, but with changes amplifying it to accommodate the increased number of pupils, but with this increase no part of it, except the grand hall, need extend the full length required for the school-rooms, unless water-closets are to be placed in the building; and in that event the wardrobes on each floor should be made for males on one side of the principal's room, and for females on the other, and the entrances to the water-closets for the respective sexes should be from the interior of the wardrobe of the proper sex.

For an eight room house, the main hall should be twelve feet wide and the stairways five feet wide, with entrances thereto distinct from the entrance-way to the ground floor. An eight room school-house is illustrated in plan No. 5.


PLATFORM
SCHOOL ROOM
23 X 28
PLATFORM
SCHOOL ROOM
23 X 28
PLATFORM
SCHOOL ROOM
23 X 28
PLATFORM
SCHOOL ROOM
23 X 28
HALL
12 X 115
UP
HALL
6 X 15
WARD-ROBE
6 X 15
WARD-ROBE
6 X 15
JANITORS ROOM
15 X 15
WARD-ROBE
6 X 15
WARD-ROBE
6 X 15
HALL
6 X 15
UP

Plan No. 5.

A number of modifications of this plan may be made and the special characteristics of the school-rooms remain undisturbed.

Furniture.—School desks should be adapted to the size and studies of those who use them. A desk suited to a pupil six years old, engaged in primary studies, is not suited to one eighteen years old, engaged in high school studies.

This adjustment of the desks to the size and duties of pupils is not a matter of mere taste and convenience, but one that has an important bearing on the discipline of the school, and the physical and mental development of the pupils. A big student crowded into a small desk, his legs uncomfortably flexed or twisted into insufficient space, his back, breast and neck strained to get his hand down to the table, and his eyes in position for duty, is not likely to be satisfactory in his studies, nor perfect in deportment during the session, nor of placid disposition at recess; nor would a six years old pupil be in better mood for advancement or enjoyment if perched upon a high school desk, his feet dangling in the air, and his chin nearly nearly on a level with the working table of the desk. Proper adjustment of the furniture of a school-room to the size and engagements of its occupants is, therefore, a prime necessity for the highest welfare of their bodies generally, their vision particularly, and their mental advancement and their deportment.

In selecting school desks, after ascertaining that the material and workmanship are good, the points to be observed are that pupils' legs shall have room for easy movement, the feet comfortably supported with liberty of change of position, the seat of a hight to meet fairly these needs, and the back supported in an easy position with privilege of change without strain or confusion. The working table of the desk should start from about the junction of the occupant's chest and abdomen in front and rise slightly away from the pupil, not rising enough to allow papers, books or implements to slide on it from gravity, and there should be no ledges nor cleats at the edges.

These are the chief qualities of a school-desk and no arrangement of drawers nor shelves, no ideas of style, taste or effect should be allowed to dominate or abridge them, but these being accounted supreme all proper attention to esthetics may be indulged in.

Black-boards should be placed on the east, north and west walls of school-rooms that are lighted exclusively from the south, and on the east and west walls if both south and north sides have windows. Their surfaces should be plain, smooth, and dull, never glossy or glaring.

Walls above black-boards or where not occupied by them should be of neutral tint, or light greenish blue color, and the ceiling white.

Desks and other wood work in the room may be of any medium tint but never glossy or glaring.

GENERAL OBSERVATIONS.

When a building of any kind is to be erected the first step is for the party responsible for the plan to comprehend precisely the purpose the building is to subserve, and then maintain that idea as a controlling influence in every subsequent proceeding until the building is completed; and while every structure should be designed so as to come within the rules of architectural practicability and safety, the adaptation of a building for its special mission should never be sacrificed to architectural esthetics.

Sentiment is more potent than science in directing the common affairs of life, and the prophet of applied science will have poor success in bettering the management of common affiairs who fails to measure the force of prevalent opinion in the direction he is working or ignores its claims to attention. Discreet management may lead wrong sentiment into right channels; mordant opposition may render error immovable.

Too many parties, individuals and boards, allow themselves to dwell on the problem of how elegant and attractive they can make a building with the means at their command and yet have it passably available for its intended service, instead of being animated with the reverse of that sentiment, *i. e.*, after the highest adaptation of the building to its special dedication is secured, what will be the available means for elegance of style and attractiveness of finish.

While insisting upon this adaptability of all buildings being the governing idea, there is no disposition to assert that elegance and attractivness are never elements in the adaptation of a building to its legitimate uses, for they are sometimes among the most important factors, and even in a school-house a certain neatness and harmony of finish are elements of educational usefulness. It is the useless and the incongruous that should be suppressed.

And the fact still remains that the fundamental law dominant in the plan and construction of every building should be that it be fitted in the highest degree for the purpose it is intended to subserve.

A school-house is unique; it is unlike a dwelling, a store or a church; and while it admits of many legitimate peculiarities of structure, these are greatly neglected, and there is no class of buildings equally important in which so many mischievous departures from the very best arrangement have been made in subservience to general appearance or particular ornamentation.

If the plans for school-houses portrayed in this dissertation embrace the features essential to the best results for body and mind of youth during school-house life, there need be no hesitation to adopt them because they seem to run counter to the prevailing styles of school-house architecture, and to the outside spectator may not appear attractive, for this is but a seeming, not a reality. A moment's reflection should convince that with amplitude of site and abundant funds the most imposing building, with grandest external architectural display and richest internal finish, even far beyond propriety, may be constructed with school-rooms that have every valuable feature herein set forth, maintained unimpaired.

It is not within the purview of this essay to present details further than to illustrate principles, otherwise suggestions could be offered that would set forth the buildings of each plan with as much architectural beauty, external and internal, as could be profitably attached to any other plan available for the like education of the same classes.

EXISTING SCHOOL-HOUSES.

A review of the sanitary conditions and necessities of school-houses and school-life would be incomplete without some consideration given to the hundreds of thousands of school-houses now in use throughout the Union. It is not putting it too strongly to say that most of these houses have been constructed with but little regard for the plainest rules of school hygiene, and are maintained with small attention to many sanitary needs that might be readily provided.

This statement rests not on common fame alone, but in several cities and some of the States, authoritative inquiry has established its correctness by official observation. In rural situations especially, there is often need of enlightenment as to what should be done and of encouragement to do it, and keep up a vigilant superintendence.

So far as may be, the principles of sanitation already laid down for the construction of new school-houses should be applied to the repair and maintenance of those already in use. If the ground around a district school-house is not such that the surface drainage is away from the building, it should be made so. No water should be allowed to accumulate about the entrance to the building during rains, and the approaches from the highway and the paths to the outhouses should be elevated and kept clear of water and mud.

An ample supply of potable water should be within easy and uninterrupted access, and waste water should be disposed of so as not to make a sloppy place about the pump, or elsewhere on the premises.

Each sex should have its separate privy, so arranged as to be absolutely private at the resort itself, and as nearly so as practicable in the approaches. Privies should be kept clean—have such constant care as never to become offensive to sight or smell, or the sense of true decency.

Fences, and other exterior appurtenances, should be supervised, and not allowed to get out of repair or become unsightly. Whitewash is not only purifying, but beautifying.

The school building should be kept in good order outside and in. Repairs on the outside to doors, windows and shutters that need them, and a little paint, will sometimes change an uninviting school-house to an attractive place to be taught in and to teach in.

On the interior the school-house should be put into good condition, and so maintained. The floor should be smooth and free from crevices and holes that would admit cold air or emanations from beneath it. A tight floor should be secured, even at the expense of relaying or making a double one. The ceiling, also, must be sound, free from cracks or openings that would permit the exit of warm air in winter. The walls, where not occupied by black-boards, should be clean, of neutral tint, and free from glare; the windows well fitted, easily lowered from the top and raised from the bottom, and supplied with curtains adjusted to shut out offensive sunshine, but not to interfere with needed light.

In summer temperature can be successfully regulated through the windows and doors, but the warming of the room in winter is a matter of moment. If it must be done by stoves, they must be encased with a thin metal jacket to protect the pupils near them from an excess of radiant heat. The temperature of 70° F., as near as practicable, should be maintained in all parts of the room, and the temperature should be ascertained by a thermometer hung clear of exterior walls, about five feet from the floor, the sensations of both teacher and pupils for this purpose being unreliable. When the construction of a school-room is such as to render it practicable, a heater instead of a common stove should be introduced, for the sake of both warming and ventilation, the sanitary value of such an arrangement always justifying the expense.

Ventilation of a school-room consists in an effort to have the air in it as good as the air outside, and this is done here, as in other places, by dilution and dispersion. In summer it is easily accomplished through open doors and windows, but in winter the external air is cold while the internal air must be kept warm, and the interchange between must be made with as little waste of heat as possible, and in a manner to avoid currents against all inmates. By slightly opening windows and doors when admissable, while the room is occupied, and securing a complete change of air when the room is vacated for recess, or otherwise, a living degree of ventilation may be obtained. Satisfactory winter ventilation can be accomplished only by bringing in the external air through a heater, and taking out the vitiated air from near the floor, and there are but few school-rooms where a little ingenuity cannot devise a plan for the execution of this maneuver.

A few years ago the basement of a church was utilized for a common school-room. The ceiling was low, the room warmed by a cannon stove; the pupils were of the class who wore their clothes a good while, and when they came to school in the rain or played in the snow, the air in the room was soon intolerable. The stove was replaced by a heater; a hole was made in the foundation and a conduit carried the fresh air under the floor and up through the heater; wooden conduits received the foul air four inches from the floor and discharged it at the top of the windows. This device worked a satisfactory revolution, the air in the room being freed from insalubrity, so far as the testimony of the senses could be trusted.

But if it be impossible to arrange other ventilation, select favorable windows and raise the lower sash, say four inches, and insert a board the thickness of the sash to fill the space. This will create an opening between the sashes in the middle of the window, through which moderate ventilation can proceed with a minimum of interior currents.

Where light is in excess of sanitary demand, and some of the windows are in front of the pupils, such windows should be completely blinded, shutting out every ray of light.

A school-house in good repair, and its surroundings in proper condition, is more likely to have attentive and well-behaved pupils and thorough and successful teaching than one where the school-house is neglected, and the surroundings in disorder. It is not the style nor the expensiveness of an old any more than of a new school-house that gratifies the desires and improves the morals of those who use it, but the evidences of correct taste and successful attention manifested in its care. A grand school building, soiled and in disorder, depresses and debases its occupants, while a humble school-house, clean and well cared for, cheers and elevates all observers.

THE SCHOOL.

A sanitarian should not be unmindful that in conducting a school the chief factors are government and instruction, and that they are of about equal importance in the development of both body and mind of youth for adult happiness.

The government should be such that, while securing order and decorum, it should not be felt by the pupils as any abridgment of their just liberties, nor a restraint on their actions beyond the necessities of the situation, and it should be adjusted as an aid to instruction, and never carry with it the appearance of the simple exercise of arbitrary authority; and the instruction should be so imparted that the pupil shall be carried along with a constant feeling of satisfaction in his work, due to his understanding every step he takes to be a step of progress toward that fuller knowledge that every well-proportioned pupil contemplates with an intuitive and comforting pride. Such instruction is the efficient and continuing support of good government in the school-room.

The principle underlying such government and instruction is, that the pupils shall be led to realize that the methods pursued are good, and the best for their physical and mental welfare that circumstances permit, and this faith of the pupils will hang upon the ability of the teacher to inspire them with the conviction of his qualifications to teach, and his justice in governing, such ability being a combination of educational acquirements and natural tact. True, where there is not a full natural aptitude for teaching, culture can do much to cure the disability, but through nature's bestowal, or as an art accomplishment, every teacher must have the technism of his calling or the school will be a failure in every sanitary relation.

Some schools fail of success because they are hard to govern and difficult to instruct, but in a moiety of such cases, at least, the teacher will be found unsuited to the situation. Examiners should exercise as much acumen in determining the technical qualities of an applicant for a teacher's certificate as in ascertaining his literary and scientific attainments.

If all pupils were of like disposition and of equal aptitude in learning, the duties of teacher would be facile and the school days of the pupil serene; or, if the pupils could be graded according to their temperaments and sharpness of perceptions, as they are for their ages and advancements, the teacher's task would be simplified; but, in practice, the teacher has to take charge of all shades of disposition, and, in rural districts, of many stages of advancement, and on his ability to correctly measure these conditions and meet their necessities depends the sanitary and every other success of the school.

Instruction is most satisfactory when the competent teacher has no more pupils than he is able to study individually, and addresses his government and adapts his teaching to each according to the pupil's personal traits. But this is quite out of the question in common schools on account of numbers, and for the service in these schools the authorities should feel under an obligation to secure the highest order of talent.

In this connection attention should be called to the urgency that every teacher take practical notice that it is never expedient to attempt to repress the quick, intelligent and diligent pupil to the level of mediocrity, for if he can not progress in legitimate lines in good order he will advance in some unprofitable direction in disorder—his energy will not be suppressed; and it is equally futile to endeavor to force forward a slow, dull, indolent pupil into the ranks of the fair average, because it can only result in demoralizing failure after irritation to the teacher and sullen rebellion in the pupil.

While emulation among the pupils of a school or of associated schools, within appropriate limits, is commendable, there is a degree of rivalry in this behalf quite common in village schools, and not entirely absent from rural and city schools, that is seriously detrimental. In excess, the spirit of emulation leads to the cultivation of the showy, superficial and ephemeral phases of education at the expense of serviceable, profound and enduring culture; and, besides this, it excites the emotions to a degree that not infrequently unbalances the nervous system and induces temporary illness, or it may be protracted, or permanent invalidism, or even death may follow in its train.

The extra preparations by pupils for public display at the close of the school year, or during holiday or on festive occasions, must sometimes be rated as of this character, and when so, are positively to be condemned by the sanitarian, while he at the same time commends all judicious means of appropriately increasing the interest of the pupils in their schools, and cultivating a rational pride in all that pertains thereto, but the limit in either case must be in the discretion of the teacher and the school authorities, and their judgments should be matured only after due consideration of the parties to be engaged in the undertaking and the nature of the occasion.

SOME DEFECTS IN OUR SCHOOL SYSTEM AND SCHOOL-HOUSES.

BY D. N. BERG, ANDERSON, IND.

Beginning on page 246 of the Third Annual Report of the Indiana State Board of Health, Dr. J. R. Weist, of Richmond, Ind., said some excellent things on "Some Defects of Our Present School System."

While I dare not hope to improve on what the doctor has so well said, I will venture a few additional thoughts.

Some thirty or forty years ago the old fogy teacher held sway, and, by the almost constant aid of the rod, imparted to the luckless urchins who chanced to fall under his control "spellin', readin', 'ritin', and 'rithmetic." The old fireplace, the greased window paper, the slab benches and the puncheon floor were common in those days. But the old pedagogue (and I do not now remember a young teacher of that day) is still fresh in my mind. I see him as he comes to the old log school-house in the morning, taking off his coat and hat, hanging them upon well-worn pegs behind his desk, and taking up the rod, which he carried all day, and woe unto the one who was so unfortunate as to incur his displeasure.

After "books" had been called, the code of rules was read (some thirty in number), each of which ended with the assurance that whoever violated said rule would be punished, which meant with the rod. This was repeated every time a "new" pupil was enrolled.

The lessons of the day were then begun, and classes, which were almost as numerous as the pupils, were called in regular order until all were disposed of, and then came the spelling classes, which occupied a large portion of the time. No classes in arithmetic were known, each one "ciphering" for himself as best he could until he became "stalled," when the master's assistance was procured and the "sum" was "worked," and the student went ahead exploring other fields. "Choosing-up" and spelling on Friday afternoon and spelling schools at night were not neglected. When Christmas came the teacher had to "treat" or be turned or barred out until he consented to the terms proposed by the school.

Each school was a kind of independent monarchy, not hampered by iron-clad rules made to order by an expert superintendent, who had little or no experience in the school-room.

The foregoing is a brief sketch of the sort of schools we attended when we were "boys and girls together." But, behold! the scenes have been shifted, and a different picture is exposed to view—the modern school, with modern teachers directed by modern superintendents, and conducted on modern principles. Now a course of study is prepared which all who wish to enjoy the privileges thus afforded must follow implicity, without regard to mental or physical capacity, the wishes of parents or future intentions. At the beginning of each term or year the parent is instructed to provide certain books for his child, at the same time receiving a gentle reminder that unless this injunction is speedily obeyed his child will not be permitted to attend school.

The rules and regulations provide precisely how much the child shall learn in a given time; the amount of grammar, arithmetic, reading, geography, etc., he shall master. No difference how diverse the capacities of the class, whether dull, mediocre or bright; whether mentally sick, weak or strong, all are expected to make the same progress and accomplish the same results. At the close of the term an examination is held, and those who, after having crammed for the occasion, can answer a certain per cent. of the questions propounded, are advanced to a higher grade. Those who fail to do so are required to begin the next year where they began the year before, and do all the work of that year again. No matter though they obtained the required per cent. in most of the studies, they must tread the same weary way for another nine or ten months in order to become more proficient in one or two branches.

Manifestly this is unjust. Some members of these classes could have done all the work required in less time than was allotted, while the dull ones could not have done it in twice the time; they could have done *some* of it well, but in the attempt to make them do it *all* they did none of it well. It will thus be seen that under the present *regime* the bright ones are kept back, while an effort is made to compel the dull ones to do the same amount of work. As well require a lilliputian to lift as much as a Hercules.

The original intention of the law establishing these schools was to afford the children of the State an opportunity to procure a good common school education.

The course of study is now arranged with a view of landing the pupil in the college or university, when it is well known that not more than one in one hundred reach this goal.

By far the greatest number can hope to master only the branches required to be taught by law; but with our present system of crowding and hurrying they are not allowed even to do this, but are allured into the high school with the belief that they have finished common things, such as grammar and arithmetic, history and geography, and when they get a few of the rudiments of algebra, Latin and general history they are graduated, and then the wonder is "that one head can contain it all."

All individuality, both in teacher and pupil, is destroyed. If the pupil is too long he must be shortened, and if he is too short he must be stretched to suit the course of study. The teacher is furnished with the amount of work he must do in a given time, and this must be done because the superintendent requires it.

The foregoing brief description of the *old* and the *new*, the *then* and *now*, serves to bring to view two extremes. The former, while very imperfect, gave greater scope to individual effort, and whatever its defects were (which were many), as many pupils came from those schools, according to the number attending, with a good common school education, as come from the latter, with all the so-called improvements. The defects of the latter, it seems to me, are as apparent as those of the former, but I believe there is a happy mean which ought to be sought.

One of the first steps in this direction is to teach teachers and school officers that schools are made for the children and that parents have rights which these officers are bound to respect.

I am aware that to presume to say a word in criticism of our system of common schools incurs the liability of being considered an enemy to one of our best institutions. The old idea of educational training seems to be largely abandoned, while to-day all school work converges to examination week as a focus, and all classes are put upon the rack to pass this ordeal. The bright children must be kept back, much to their mental and moral detriment. The backward must be stimulated to a rank, spongy brain-growth, and to a straining effort that wrenches the whole system, and may permanently derange health, that the modern giant, *Examination*, may be appeased. Need we wonder at the remark of a teacher who says: "These dull children break down in health under such pressure; they grow more stupid, seeming to lose in general intelligence what they gain in mere technical knowledge of reading, writing and arithmetic. Their last state is worse than their first."

Does some one remark that it is easier to find fault in general terms with our school system than to suggest remedies which shall remove the objections and do no harm elsewhere?

We want a more elastic rule governing the standing of scholars, which may allow the bright to be advanced to their own advantage and the inspiration of their teachers, while the poor, mentally weak or deformed child shall not be compelled to march shoulder to shoulder with those whom "God has made full limbed and tall."

Education should be shorn of its premium in cram and examination, and should be made more pleasant, healthy and natural. "Why should a child be prepared for a classical course when he has no purpose of taking such a course, even to the neglect of the very things which would strengthen him for the very work he will have to do." We should like that question to go right home to the intelligence and heart of each educator in the State of Indiana. Teachers encourage their pupils to ask "why?" about a good many things, in order that they may the better understand what they read and study. Now the public wants to put the same searching query to the educators. It is the well-founded belief that teachers, like doctors, are too much disposed to follow beaten paths, and adopt practices that are old and approved, without thought as to whether they are suited to the times and circumstances amidst which their life's activities are cast. It is worth while to consider occasionally, if not constantly, whether our educational system is not based too much upon excellent theories and too little upon practical methods.

There is too often an endeavor to shake all pupils through the same sieve, and no effort to encourage and train the individuality of the scholars with a view to suiting them for the special duties of the openings left before them. How to do this best and most effectively, so as to make the eauses of education less exact and more accommodating to the needs of the pupils, is one of the problems that educators will do well to study. I think I mistake not when I say that the present common school system, or rather the manner in which it is conducted, is a disappointment. The results so fondly anticipated by its projectors are not realized.

The writer, not many years since, heard a school officer say to the children, as an inducement to study, that "certain kinds of work were always assigned to the uneducated; that attention to lessons and a finished education would exempt them from the ordinary burdens of life;" thus creating the impression in the youthful mind that labor is not honorable.

The defects of school houses are no less numerous than those of the school system. These consist in ventilation, lighting and heating of the rooms; in fact, in the construction of the house itself. I am aware that it is difficult to say anything upon these subjects that has not already been said, but the fact that what has been said has not been heeded renders it necessary to repeat.

There is a model in use that seems to be followed in almost all cases, the dimensions of which are about the same, without regard to the number of pupils the house is expected to accommodate.

In a circular published by the State Board of Health, August 15, 1885, it is said that "it is well known to those who have studied these questions carefully, that most of the diseases incident to school life are in quite a high degree preventable, and that one of the first and most important requirements in guarding against these diseases is to have the school houses placed in the best sanitary condition possible."

The building should conform to the following well-recognized rules, which are essential elements in school-house construction:

1. School houses should be built upon dry ground; if not dry, the lot must be deeply drained. Furthermore, proximity to swamps and other sources of stagnant water or of noxious exhalations, should be avoided. The reason for this rule is the well-known fact that dampness of soil contributes much to make a school house unhealthy. Very fatal school epidemics of diphtheria and similar diseases have been caused by exhalations from damp and filthy soil around and beneath the school house.

2. School-rooms should be oblong, with their length somewhere nearly one-third greater than their width, and with the teacher's desk in one end. In rooms of this shape the scholars are more easily observed, and controlled, and such rooms are more easily lighted. The glass surface of the windows should equal at least one-seventh or one-sixth of the floor surface.

3. The window sills should be placed never lower than *three and one-half feet* above the floor; the windows should extend upward to near the ceiling. The light which comes from considerably above the level of the desks and books, lights them much better than the more horizontal rays. High windows also light the ceiling, whence the light is reflected downward upon the desks.

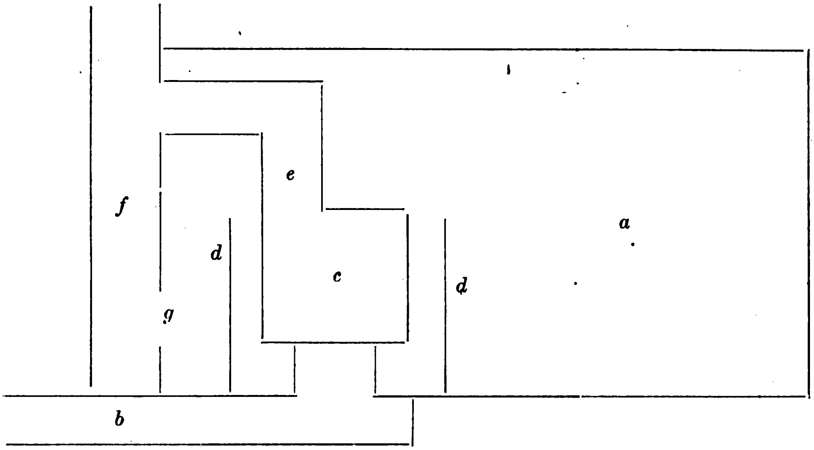
4. Windows should be placed on the sides of the room. Windows in the rear of the scholars are permissible, but in front of them never. Light from the front is very trying to the eyes. Light from behind the scholars is not injurious to their eyes, but is disadvantageous for the teacher. If the school-room is not more than twenty-three or twenty-four feet in width it may be lighted wholly from one side. Then the light is better from the left. In single-room school-houses it is better upon the whole to light from two sides with no windows behind the pupils. Then, when it can be done, let the school-house be placed so that its windows may be on the north and south sides of the building.

5. Do not place the black-boards between or near the windows. This matter of lighting school-rooms has come to be regarded as very important, since it is found that near-sightedness and other very serious eye troubles are caused or intensified by faulty methods of lighting.

6. In rooms for study, each pupil should have twenty square feet of floor space, and this, with the hight of twelve feet for the ceiling, will give 240 cubic feet of air space for each scholar. Ceilings should never be lower than twelve feet, and in ordinary rooms never much higher. This amount of floor and of cubic air space is required to make efficient ventilation possible.

7. Never think that a school-room is completed until there is some way of getting fresh warmed air into it and the foul air out. Ventilation costs something in fuel, but it is a penny wise and pound foolish policy which omits it. The apparatus to obtain it need, especially in small schools, cost but a few dollars.

An arrangement for heating and ventilating a school-room in an economical manner is given in the following straight line illustration:



a, represents the school-room; *b*, the fresh air box; *c*, the stove; *d*, *d*, the sheet iron jacket around the stove, enclosing its sides except the door; *e*, the stove pipe; *f*, the chimney, which serves as a smoke flue, and at the same time as a ventilation flue, by leaving an opening near the floor level at *g*.

With this arrangement the cold air enters through the fresh air box, and passing through the opening in the floor, is warmed between the stove and the jacket which surrounds it. It then discharges itself into the room as fresh, warmed air. The colder and impure air along the floor is removed by the ventilating register or opening at the bottom of the flue.

If the house is already built and the chimney comes down only a little below the ceiling, the ventilation flue can be carried down to the floor by making another opening below that occupied by the stove pipe, and then putting in another pipe of tin or sheet iron, with its lower opening near the floor.

A partial sanitary survey of the school-houses of Indiana a few years ago revealed very many unhygienic conditions, a very few of which we are led to believe have been corrected, and until the people wake up to a sense of their duty, and compel school officers to remedy these faults, the indiscriminate slaughter of school children will go on.

Every year new school houses are constructed after the same model so long in use, with no improvement over those built ten or fifteen years ago. How long will parents suffer their children to be thus treated? How long will they consent to have the health of these innocents shattered while attending school? It is a lamentable fact that our boys and girls are pale and sickly. If these schools do not train the child physically as well as mentally they fail to do their whole duty.

ADULTERATION.

BY S. S. BOOTS, M. D., GREENFIELD, IND.

This might, with some degree of propriety, be termed the age of adulteration, as much, if not a large majority, of the necessaries of life, both food and raiment, as well as that used for ornament, is manipulated by the adroit manufacturer or salesman by adding some substance that will increase the weight, quantity or beauty of the article, that his sales and profits may be correspondingly increased. Some of these adulterants are harmless, and are only reprehensible on account of the actual fraud perpetrated upom the consumer. As examples we might mention ground spices and coffee mixed with roasted and ground peas, beans, corn, chicory or other harmless substances; ground mustard, having a large per cent. of flour incorporated with it; maple syrup or sugar mixed with a cheap grade of cane sugar. While this class of adulteration is not injurious to health, it is nevertheless wrong, and should be discouraged by prompt and decisive legislation. Another example of adulteration that is not injurious, but, upon the other hand, from the use often made of the article, it might be considered a benefit; we refer to the addition of water to alcoholic and vinous liquors when used as a beverage, and in such cases when water alone is used for the purpose of increasing the wine merchant's stock in trade, it should be encouraged—possibly even protected by legislation. This rule, however, should not be applicable to the milkman who has recourse to the pump or running brook to increase the quantity of the lacteal fluid furnished his customers. When alcoholic liquors are diluted with water only, the adulteration of itself will do no harm; but when used as a medicine, will fail to do just what was intended of it, and in this way may be detrimental. When watered, and then drugs added for the purpose of making it appear and taste as if of full strength and age, it becomes a dangerous beverage, a compound that should be shunned by all, be they sick or in good health. This should be condemned under all circumstances, and in the strongest manner, as it is practicing a fraud upon the consumer, even though the foreign substance be harmless, and when agents are used that are liable to sap the health of those using them it is doubly so. If we commence investigating the subject of adulteration of liquors, and are in the habit of, or think it necessary to take a little wine for our "stomach's sake," or are in need of the beverage of the "Fatherland" as a pleasant stimulating tonic, or perhaps feel a necessity, or at least imagine so, of that stronger stimulant, whisky, we become convinced that there is a strong probability that we introduce into our system something of an entirely different character than was intended.

A true beer should contain a small per cent. of alcohol, carbonic acid and the extract of hops or hop resin. Sometimes a harmless bitter is substituted for the hops, in which case it would not be considered injurious, but when nux vomica, picric acid, absinthin, aloes, etc., etc., are used as a substitute for hops, the beer guzzler will be very likely to suffer from their effects upon his system. There will be, in addition to the symptoms usually observed in habitual beer drinkers, others that are characteristic of the adulterant, as, when picric acid has been employed there will be a sallow appearance of the skin, the conjunctiva will become yellow, the sufferer having a jaundiced appearance that may be so well marked as to be mistaken for icterus. Cramps of the stomach sometimes follow its use. Nux vomica and absinthin will each cause muscular and nervous difficulties peculiar to them. When aloes is used there will be produced a chronic inflammation of the intestinal tract, especially of the rectum, and hæmorrhoides will likely be produced. Resin is often found in large quantities in beer, which is sufficient to explain why so many who use this beverage freely are subject to disease of the kidneys.

Wine is the fermented juice of the grape, and is probably adulterated to a greater extent than any other of the liquors; this is deplorable for the reason that it is very largely used in sickness, especially during convalescence. Sometimes an invalid, feeling the neccssity of a mild stimulant, will use wine freely for weeks or months, and when impure is injurious and dangerous. Some liquors or mixtures purporting to be wine do not contain a particle of grape juice, the body or bulk being water, with enough brandy or alcohol to give it the desired spiritous taste; it is colored with logwood, brazil wood, fuchsine, etc. The desired flavor is given by adding extracts of various substances, mixed with ether, and this compound is what in many instances will be obtained when purchasing wine. M. Pradines has published a test which it is claimed will answer three questions.

First—Is the wine natural?

Second—Is it diluted?

Third—Whether any product of the grape has been used in its manufacture?

The reagent is prepared by saturating pure ammonia with rectified ether, which is then filtered and kept in well-stopped flasks, protected from the light. To test any suspected wine pour a little water in a test tube, add about one drachm of the wine, shake well, then drop into the mixture five or six drops of the reagent, and shake again. If the wine is pure there will appear where the mixture and reagent comes in contact a beautiful green color. If the color be pale green, then the wine has been diluted, the greater the amount of water the paler the color. If this pale green color becomes rapidly clouded and obscured, the wine has been diluted, and some coloring matter added for the purpose of giving it a genuine appearance. If, when the reagent is incorporated with the mixture it gives no color, or some color with no trace of green, then it is not wine at all, but some vile compound.

It is unnecessary to pursue the subject of adulteration of liquors further, as it is generally understood that much of it is impure and unfit for use as a beverage, and much less as a medicine. It should not be used only for the latter purpose, prescribed by a competent physician, and purchased from a conscientious druggist.

Among the necessaries of life many of them are almost unfit for use, and some are positively dangerous from their admixture with other materials for the purpose of placing them on the market at a lower cost than a genuine article could be sold for. Syrups and sugars are largely manipulated for this purpose; in fact, it is often quite difficult to find a pure article of cane sugar. Sometimes sugar that is otherwise pure is made objectionable by the addition of something for the purpose of enhancing its appearance. Samples of the finest looking granulated sugar may, when melted, throw up a thick cream-colored scum, often containing a bluish sediment. This is an impurity added for the purpose of giving it a fine appearance. Glucose is probably used for the purpose of adulterating syrups and sugar oftener than any other article, which, from the manner of its manufacture, is sometimes quite poisonous. The amount of this article is so large in some samples as to be, in fact, glucose, containing only a per cent. of cane sugar. Any sugar that throws up much of a scum on boiling should be rejected, especially if containing any coloring matter or sediment. The easiest way of testing for glucose is with Fehling's solutions, prepared as follows:

Soda Solution.—Dissolve 2681 parts of neutral potassium tartrate in 9300 parts of solution of caustic soda, specific gravity, 1.12.

Copper Solution.—Dissolve 536 parts of pure crystallized sulphate of copper in sufficient distilled water to measure the same as the soda solution.

To test a sample of sugar, dissolve equal parts, by measure, of sugar and water by the aid of heat. In a test tube mix equal parts of the soda and copper solutions, say one drachm each, then add an equal quantity (two drachms) of the sugar solution. Bring the mixture to the boiling point, and continue for a moment; if glucose is present the mixture will assume a reddish or brownish red color that will, on cooling, deposit a reddish sediment (cuprous oxide, Cu_2O).

Butter sometimes contains foreign matter, but as a rule it is only a coloring that will make a poor white article appear as fine and tempting as that made from a grass-fed Jersey. This coloring substance is generally harmless and is only a fraud because it makes the article appear what it is not. This, however, can be pardoned if it makes it any more inviting to the palate of the consumer. There is manufactured an article called oleomargarine, butterine, etc., recommended as a substitute, but is often sold for genuine butter; it then becomes at least fraudulent, if not dangerous. Butter substitutes, even when made with care, may be injurious, as their principal bulk is composed of animal fats which are indigestible and insoluble, and are quite liable to be a vehicle for disease germs; to this is added such articles as benzoic and salicylic acids, alum, borax, nitric acid and coloring matter; it is then packed in tubs or is molded into proper shape, and the vile mixture is often sold for fresh butter.

A very simple means of testing butter, is to heat a small portion in an iron spoon and observe the odor; pure butter has a scent peculiarly its own which can not be counterfited when heat is applied. Tallow and lard, also, each have a characteristic smell, and as all butter substitutes are composed principally of one or both of these agents, the heat-test will be very likely to give a satisfactory answer in a majority of cases. From the fact that butterine generally contains ten to thirty per cent. of butter, the following simple test, said to be infalible is recommended: Melt the suspected butterine, then surround with some freezing mixture as snow or pounded ice, when if lard or tallow be present it will sink to the bottom causing a separation of the butter and other fats. This is brought about by the difference in their melting points, which is from five to fifteen degrees.

Another source of danger from adulteration by partaking of food, is where it becomes contaminated indirectly from other adulterated materials; one prominent source of slow poisoning by this means is from canned goods, especially fruits. This is from the tin in the can being mixed with more or less lead. The large demand for this metal and it being somewhat scarce, coupled with its comparative high price, have led the manufacturers to acquaint themselves with a plan of making what is called tin plate by incorporating a large per cent. of lead with the tin. All of the inferior grades of tin plate contain much lead, in fact, it should be called lead plate, containing a small quantity of tin. Much of what is known and sold as the better grades of tin plate contain some lead, and it will be found upon trial to be very difficult to obtain a perfectly pure article. Fruits preserved in cans made from this kind of tin, will, by their acid, dissolve some of the lead, which finally finds its way into the system of some unsuspecting person. It may be in such small quantities as not to call the attention of the consumer to anything wrong, though partaken of freely from time to time, but it may cause or lay the foundation of some serious ailment that may be of such a character as not to call the physician's attention to the cause, and possibly while being treated for a disease of an entirely different nature from that existing in the patient, he is continuing the use of the contaminated fruit and is thereby supplying his already poisoned system wih a sufficient quanty of lead to continue his unhappy condition. The use of this kind of tinware for culinary purposes is very liable to produce chronic lead poisoning, and it is quite probable that many obscure diseases have their origin from this source.

Test for Lead.—From a suspected piece of tin, scrape a few grains of the tinned surface, place in a test tube, add a few drops of nitric acid, apply the flame of a spirit lamp until dissolved. This solution is now to be mixed with a little water and sulphide of hydrogen passed through when if lead is present it will be precipitated as the black sulphide of lead. If mercury or copper be present, they will also be precipitated as sulphides, and are identical in appearance with sulphide of lead. To distinguish the lead, add the precipitate to a little warm nitric acid, filter, then add to the filtrate a little sulphuric acid and a white precipitate will be the result if lead was present. If there was copper in the precipitate with the sulphite of hydrogen, the solution of it in the nitric acid will be of a green color.

Another means of injuring those brought under their influence is the use of poisonous coloring matter in articles of clothing, curtains and wall paper. It might be claimed that this was not adulteration, as there was no misrepresentation, there being no claim made as to the non-poisonous character of the dyes used for coloring purposes. This may be true as a proposition of fact, but they should nevertheless be considered dangerous, their use prohibited and the people enlightened as to the true character and danger of using any article colored with a poisonous dye. Some of the most prominent of the objectionable materials used in coloring and sizing goods are arsenic, copper and lead, to which undoubtedly many eruptions and skin diseases can be traced. Some years since when paper collars were introduced as a substitute for linen it was quite frequent that persons were met with, especially in warm weather, with an eruption about the neck that was in all probability caused by the material used as a glazing on the collars. Diseases of the skin may be produced upon any part of the surface coming in contact with any cloth or article of clothing containing any poisonous coloring matter. This seems to be very generally understood by the masses as far as the danger likely to occur from the use of any colored cloth upon a sore or wound, and almost invariably anything but a white cloth is rejected for a bandage in domestic surgery, but as a rule they do not understand that there is any danger providing there is no wound or sore.

I call to mind the case of a young lady that was injured near the ankle in such a manner as to abrade the skin; in a short time afterward upon a very warm day she wore a bright red stocking which came in direct contact with the injured part; in a few hours the surface about the sore became very much inflamed and painful; in a few days it began to slough, and quite a large ulcer was the result. After being treated for a considerable length of time the sore was healed, but soon began to suppurate again. It could be healed but would in a few days break out again in the same place or adjacent; sometimes there would be three or four small indolent ulcers existing at the same time. The case was finally cured by using in conjunction with the local applications constitutional treatment. This difficulty surely originated from the colored stocking, as there was no constitutional taint, and she was previously, as well as afterward enjoying the best of health. If upon wearing any colored garment there should be observed an eruption of the skin or any unnatural or peculiar sensation, at once discard such article of clothing or take such action as would be necessary to establish the harmlessness of its coloring. Sometimes dangerous materials are present in such large quantities in the coloring matter of domestic articles as to impart to the person who may be brought in close contact with them the physiological or constitutional effect of the deleterious agents. Milliners and dressmakers are painfully aware of the unpleasant influence some articles of dress, with which they sometimes come in contact, have upon them. The action of these agents upon the system when brought by the use of clothing is generally so slow in its development, and other organs or parts of the economy that are not acted upon by the poison in question become impaired in action through sympathy or as a secondary difficulty in consequence of the disturbed condition of the part influenced by the poisonous substance, that the true nature of the malady may be overlooked and the sufferer remain under the baneful influence of the cause of his ailment while being treated for a disease of an entirely different character than the one existing. The injurious action upon the system from this cause can be readily observed by sleeping in a dry goods store. Upon waking there will be a headache, a sense of tiredness and languor, with but little appetite for the morning meal. These symptoms soon call attention to the fact that sleeping in the store is injurious to the health of the person, or he feels the need of air and exercise and resigns his position and escapes the inevitable slow death by poison had he continued.

Many samples of wall paper are unfit for use, containing in their coloring poisons dangerous and deadly, that may, from the exfoliation of small, dust-like particles mixing with the air and entering the system by inhalation, cause disease peculiar to the agent This is more likely to occur in poorly-ventilated apartments. Where the air is not rapidly changed it becomes laden with a greater per cent. of the poisonous dust, consequently a large amount finds its way into the system in a given time. A room hung with paper of this kind would be very unsuitable for a person who might from any cause be confined exclusively to his apartments. Arsenic and lead are, perhaps, employed to a greater extent than any other dangerous materials in the manufacture of wall paper, and they will most certainly injure, to a greater or less degree, every one who may be subjected to the contaminating influence of the air of a room hung with paper containing these elements. It is the duty of the physician in every case of sickness occurring in papered apartments, where any of the symptoms are in the least such as could be expected from the action of these agents, to make a chemical test of the paper for the suspected poisons. This may be easily done by saturating a piece of the suspected paper with a solution of chlorate of potassa, which, after being thoroughly dried, is to be burned beneath a perfectly clean bell glass, the ashes to be pulverized and dissolved in water; the arsenic and potash will be found in solution, while lead, tin, chromium and copper, if present, remain as oxides in the insoluble portion. The solution may now be tested for arsenic by any convenient method; the one we prefer is the arsenuretted hydrogen, or Marsh's test. This, with others, is so clearly defined in every work on chemistry that it is unnecessary to repeat it here. To test for lead, the insoluble portion should be dissolved in warm nitric acid and treated as directed, in testing for lead in adulterated tin, which will also distinguish copper if there was any in the paper. The influence of poisonous wall papers upon the health of the people has been deemed of so much importance in Massachusetts that there is before the Committee on Public Health a bill to prevent the manufacture and sale of wall papers containing arsenic. There have been a number of persons summoned before the committee to give information upon the subject, among whom were a number of leading chemists, who strongly approve of steps being taken to secure legislative measures for the purpose of discontinuing the use of arsenic in the manufacture of paper. The wall-paper men, on the other hand, are striving to kill the bill, and have employed counsel, also an expert chemist, to use their power and influence against the bill. It remains to be seen whether money or the life and health of the people weigh most in this case.

The subject of adulteration might be continued almost indefinitely, as almost every article of food, drink, raiment and ornament is adulterated, and a large majority of these with such as are injurious and dangerous to the health and life of any person brought under their influences. This condition of affairs has become truly alarming, and we have only to investigate for a short time the different articles that are necessary for our convenience, comfort and existence, when we become almost horrified, and can only wonder why it is that our health is as good and our days are so long in the land as they are. It should be the duty of the different Boards of Health to acquaint themselves with the facts concerning adulteration with the best and simplest means of detecting the same, and then disseminate this knowledge to every physician in their jurisdiction, and they to the people at large, who, in turn, should demand of their law-making bodies the necessary relief and protection from the consummate villian who would, that his profits might be increased, add to any article for public consumption anything foreign or injurious, thereby sapping the health and life of an innocent consumer.

DISINFECTION AND DISINFECTANTS.

PRELIMINARY REPORT MADE BY THE COMMITTEE OF THE AMERICAN PUBLIC HEALTH ASSOCIATION.

The object of *disinfection* is to prevent the extension of infectious diseases by destroying the specific infectious material which gives rise to them. This is accomplished by the use of *disinfectants*.

There can be no partial disinfection of such material; either its infecting power is destroyed or it is not. In the latter case there is a failure to disinfect. Nor can there be any disinfection in the absence of infectious material.

It has been proved for several kinds of infectious material that its specific infecting power is due to the presence of living micro-organisms, known in a general way as "disease germs;" and practical sanitation is now based upon the belief that the infecting agents in all kinds of infectious material are of this nature. Disinfection, therefore, consists essentially in the destruction of disease germs.

Popularly, the term disinfection is used in a much broader sense. Any chemical agent which destroys or masks bad odors, or which arrests putrefactive decomposition is spoken of as a disinfectant. And in the absence of any infectious disease it is common to speak of disinfecting a foul cess-pool, or a bad-smelling stable, or privy vault.

This popular use of the term has led to much misapprehension, and the agents which have been found to destroy bad odors—*deodorizers*—or to arrest putrefactive decomposition—*antiseptics*—have been confidently recommended and extensively used for the destruction of disease germs in the excreta of patients with cholera, typhoid fever, etc.

The injurious consequences which are likely to result from such misapprehension and misuse of the word disinfectant will be appreciated when it is known that:

Recent researches have demonstrated that many of the agents which have been found useful as deodorizers, or as antiseptics, are entirely without value for the destruction of disease germs.

This is true, for example, as regards the sulphate of iron or copperas, a salt which has been extensively used with the idea that it is a valuable disinfectant. As a matter of fact, sulphate of iron in saturated solution does not destroy the vitality of disease germs or the infecting power of material contained in them. This salt is, nevertheless, a very valuable antiseptic, and its low price makes it one of the most available agents for the arrest of putrefactive decomposition in privy vaults, etc.

Antiseptic agents also exercise a restraining influence upon the development of disease germs, and their use during epidemics is to be recommended, when masses of organic material in the vicinity of human habitations can not be completely destroyed, or removed, or disinfected.

While an antiseptic agent is not necessarily a disinfectant, all disinfectants are antiseptics; for putrefactive decomposition is due to the development of "germs" of the same class as that to which disease germs belong, and the agents which destroy the latter also destroy the bacteria of putrefaction, when brought in contact with them in sufficient quantity, or restrain their development when present in smaller amounts.

A large number of the proprietary "disinfectants," so called, which are in the market, are simply deodorizers or antiseptics, of greater or less value, and are entirely untrustworthy for disinfecting purposes.

Antiseptics are to be used at all times when it is impracticable to remove filth from the vicinity of human habitations, but they are a poor substitute for cleanliness.

Curing the prevalence of epidemic diseases, such as yellow fever, typhoid fever and cholera, it is better to use, in privy vaults, cess-pools, etc., those antiseptics which are also disinfectants—i. e., germicides; and when the contents of such receptacles are known to be infected this becomes imperative.

Still more important is the destruction at our sea-port quarantine stations of infectious material which has its origin outside of the boundaries of the United States, and the destruction, within our boundaries, of infectious material given off from the persons of those attacked with any infectious disease, whether imported or of indigenous origin.

In the sick-room we have disease germs at an advantage, for we know where to find them as well as how to kill them.

Having this knowledge, not to apply it would be criminal negligence, for our efforts to restrict the extension of infectious diseases must depend largely upon the proper use of disinfectants in the sick-room.

GENERAL DIRECTIONS.

Disinfection of Excreta, etc.—The infectious character of the dejections of patients suffering from cholera and from typhoid fever is well established; and this is true of mild cases and of the earliest stages of these diseases as well as of severe and fatal cases. It is probable that epidemic dysentery, tuberculosis and perhaps diphtheria, yellow fever, scarlet fever and typhus fever may also be transmitted by means of the alvine discharges of the sick. It is therefore of the first importance that these should be disinfected. In cholera, diphtheria, yellow fever and scarlet fever, all vomited material should also be looked upon as infectious! And in tuberculosis, diphtheria, scarlet fever, and infectious pneumonia, the sputa of the sick should be disinfected or destroyed by fire. It seems advisable also to treat the urine of patients sick with an infectious disease with one of the disinfecting solutions below recommended.

Chloride of lime, or bleaching powder, is, perhaps, entitled to the first place for disinfecting excreta, on account of the rapidity of its action. The following standard solution is recommended:

STANDARD SOLUTION NO. 1.

Dissolve Chloride of Lime of the best quality[*] *in soft water, in the proportion of four ounces to the gallon.*

Use one pint of this solution for the disinfection of each discharge in cholera, typhoid fever, etc. Mix well and leave in vessel for at least ten minutes before throwing into privy-vault or water-closet. The same directions apply for the disinfection of vomited matters. Infected sputum should be discharged directly into a cup half full of the solution.

STANDARD SOLUTION NO. 2.

Dissolve Corrosive Sublimate and Permanganate of Potash in soft water, in the proportion of two drachms of each salt to the gallon.

This is to be used for the same purposes and in the same way as *Standard Solution No.* 1. It is equally effective, but it is necessary to leave it for a longer time in contact with the material to be disinfected—at least an hour. The only advantage which this solution has over the chloride of lime solution consists in the fact that it is odorless, while the odor of chlorine in the sick-room is considered by some persons objectionable. The cost is about the same.[†] It must be remembered that this solution is highly poisonous. It is proper, also, to call attention to the fact that *it will injure lead pipes if passed through them in considerable quantities.*

STANDARD SOLUTION NO. 3.

To one part of Labarraque's Solution (liquor sodæ chlorinatæ), add five parts of soft water.

This solution is more expensive[‡] than the solution of chloride of lime and has no special advantages for the purposes mentioned. It may, however, be used in the same manner as recommended for *Standard Solution No.* 1.

Disinfection of the Person.—The surface of the body of a sick person, or of his attendants, when soiled by infectious discharges, should be at once cleansed with a suitable disinfecting agent. For this purpose *Standard Solution No.* 3 may be used.

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[*] NOTE.—Good chloride of lime should contain at least 25 per cent. of available chlorine. (See preliminary report of committee on disinfectants; *The Medical News*, Philadelphia, February 7, 1885, page 147.) It may be purchased by the quantity at 5 cents per pound. The cost of the standard solution recommended is therefore less than 2 cents a gallon. A clear solution may be obtained by filtration or by decantation, but the insoluble sediment does no harm and this is an unnecessary refinement.

[†] Corrosive sublimate costs about 70 cents a pound, and permanganate of potash 65 cents a pound, by the single pound. This makes the cost of *Standard Solution No. 2* a little more than 2 cents a gallon.

[‡] We assume that the solution used will contain at least 3 per cent. of available chlorine, which would give us 0.5 per cent. in the diluted solution. The cost per gallon of the undiluted solution should not be more than 50 cents, by the quantity. This would make our standard solution cost between 8 and 9 cents a gallon.

In diseases like small-pox and scarlet fever, in which the infectious agent is given off from the entire surface of the body, occasional ablutions with Labarraque's Solution, diluted with twenty parts of water, will be more suitable than the stronger solution above recommended.

In all infectious diseases the surface of the body of the dead should be thoroughly washed with one of the standard solutions above recommended, and then enveloped in a sheet saturated with the same.

Disinfection of Clothing.—Boiling for half an hour will destroy the vitality of all known disease germs, and there is no better way of disinfecting clothing or bedding which can be washed than to put it through the ordinary operations of the laundry. No delay should occur, however, between the time of removing soiled clothing from the person or bed of the sick and its immersion in boiling water, or in one of the following solutions; and no article should be permitted to leave the infected room until so treated.

STANDARD SOLUTION NO. 4.

Dissolve corrosive sublimate in water in the proportion of four ounces to the gallon, and add one drachm of permanganate of potash to each gallon to give color to the solution.*

One fluid ounce of this standard solution to the gallon of water will make a suitable solution for the disinfection of clothing. The articles to be disinfected must be thoroughly soaked with the disinfecting solution and left in it for at least two hours, after which they may be wrung out and sent to the wash.

N. B. *Solutions of corrosive sublimate should not be placed in metal receptacles,* for the salt is decomposed and the mercury precipitated by contact with copper, lead or tin. A wooden tub or earthen crock is a suitable receptacle for such solutions.

Clothing may also be disinfected by immersion for two hours in a solution made by diluting *Standard Solution No.* 1 with nine parts of water—one gallon in ten. This solution is preferable for general use, especially during the prevalence of epidemics, on account of the possibility of accidents from the poisonous nature of *Standard Solution No.* 4. When diluted as directed this solution may, however, be used without danger from poisoning through the medium of clothing immersed in it, or by absorption through the hands in washing. A poisonous dose could scarcely be swallowed by mistake, owing to the metallic taste of the solution, and the considerable quantity which would be required to produce a fatal effect—at least half a pint.

Clothing and bedding which can not be washed may be disinfected by exposure to dry heat in a properly constructed disinfecting chamber for three or four hours. A temperature of 230° Fah. should be maintained during this time, and the clothing must be freely exposed—*i. e.*, not folded or arranged in piles or bundles, for the penetrating power of dry heat is very slight.

The limitations with reference to the use of dry heat as a disinfectant are stated in a "Preliminary Report of the Committee on Disinfectants," published in *The Medical News*, Philadelphia, March 14, 1885.

The temperature above mentioned will not destroy the *spores* of bacilli—e. g. of the anthrax bacillus, but is effective for the destruction of all disease germs which do not form spores; and there is good reason to believe that this list includes small-pox, cholera, yellow fever, diphtheria, erysipelas, puerperal fever, and scarlet fever (?). Moist heat is far more effective, and it is demonstrated that ten minutes exposure to steam, at a temperature of 230° Fah., will destroy all known disease germs, including the most refractory spores.

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* Mercuric chloride (corrosive sublimate) is soluble in cold water in the proportion of one part in sixteen. Solution is greatly facilitated by heat.

In the absence of a suitable disinfecting chamber, it will be necessary to burn infected clothing and bedding, the value of which would be destroyed by immersion in boiling water, or in one of the disinfecting solutions recommended.

Disinfection of the Sick Room.—In the sick room no disinfectant can take the place of free ventilation and cleanliness. It is an axiom in sanitary science that *it is impracticable to disinfect an occupied apartment;* for the reason that disease germs are not destroyed by the presence in the atmosphere of any known disinfectant in respirable quantity. Bad odors may be neutralized, but this does not constitute disinfection in the sense in which the term is here used. These bad odors are, for the most part, an indication of want of cleanliness, or of proper ventilation; and it is better to turn contaminated air out of the window, or up the chimney, than to attempt to purify it by the use of volatile chemical agents, such as carbolic acid, chlorine, etc., which are all more or less offensive to the sick, and are useless so far as disinfection —properly so-called—is concerned.

When an apartment which has been occupied by a person sick with an infectious disease is vacated, it should be disinfected. But it is hardly worth while to attempt to disinfect the atmosphere of such an apartment, for this will escape through an open window and be replaced by fresh air from without, while preparations are being made to disinfect it. Moreover, experience shows that the infecting power of such an atmosphere is quickly lost by dilution, or by the destruction of floating disease germs through contact with oxygen, and that even small-pox, and scarlet fever are not transmitted to any great distance through the atmosphere; while cholera, typhoid fever, and yellow fever, are rarely, if ever, contracted by contact with the sick, or by respiring the atmosphere of the apartments occupied by them.

The object of disinfection in the sick room is, mainly, the destruction of infectious material attached to surfaces, or deposited as dust upon window-ledges, in crevices, etc. If the room has been properly cleansed and ventilated while still occupied by the sick person, and especially if it was stripped of carpets and unnecessary furniture at the outset of his attack, the difficulties of disinfection will be greatly reduced.

All surfaces should be thoroughly washed with a solution of corrosive sublimate of the strength of one part in 1,000 parts of water, which may be conveniently made by adding four ounces of *Standard Solution No.* 4 to the gallon, or one pint to four gallons of water. The walls and ceiling, if plastered, should be brushed over with this solution, after which they should be whitewashed with a lime wash. Especial care must be taken to wash away all dust from window-ledges and other places where it may have settled, and to thoroughly cleanse crevices and out-of-the-way places. After this application of the disinfecting solution, and an interval of twenty-four hours or longer for free ventilation, the floors and woodwork should be well scrubbed with soap and hot water, and this should be followed by a second more prolonged exposure to fresh air, admitted through open doors and windows.

Many sanitary authorities consider it necessary to insist upon fumigation with sulphurous acid gas—produced by combustion of sulphur—for the disinfection of the sick room. As an additional precaution this is to be recommended, especially for rooms which have been occupied by patients with small-pox, scarlet fever, diphtheria, typhus fever and yellow fever. It should precede the washing of surfaces and free ventilation above recommended. But fumigation with sulphurous acid gas alone, as commonly practiced, can not be relied upon for the disinfection of the sick room and its contents, including bedding, furniture, infected clothing, etc., as is popularly believed. And a misplaced confidence in this mode of disinfection is likely to lead to a neglect of the more important measures which have been recommended. In the absence of moisture the disinfecting power of sulphurous acid gas is very limited, and under no circumstances can it be relied upon for the destruction of spores.* But exposure to this agent in sufficient quantity, and for a considerable time, especially in the presence of moisture, is destructive of disease germs, in the absence of spores. It is essential, however, that the germs to be destroyed shall be very freely exposed to the disinfecting agent, which has but slight penetrating power.

To secure any results of value it will be necessary to close the apartment to be disinfected as completely as possible by stopping all apertures through which the gas might escape, and to burn not less than three pounds of sulphur for each thousand cubic feet of air-space in the room.† To secure complete combustion of the sulphur it should be placed, in powder or in small fragments, in a shallow iron pan, which should be set upon a couple of bricks in a tub partly filled with water, to guard against fire. The sulphur should be thoroughly moistened with alcohol before igniting it.

Disinfection of Privy-vaults, Cess-pools, etc.—When the excreta— not previously dis-vault this is infected, and disinfection should be resorted to as soon as the fact is infected—of patients with cholera or typhoid fever, have been thrown into a privy-discovered, or whenever there is reasonable suspicion that such is the case. It will be advisable to take the same precautions with reference to privy-vaults into which the excreta of yellow fever patients have been thrown, although we do not definitely know that this is infectious material. Disinfection may be accomplished either with corrosive sublimate or with chloride of lime. The amount used must be proportioned to the amount of material to be disinfected.

Use one pound of corrosive sublimate for every five hundred pounds—estimated—*of fecal matter contained in the vault, or one pound of chloride of lime to every thirty pounds.*

Standard Solution No. 4, diluted with three parts of water may be used. It should be applied—the diluted solution—in the proportion of one gallon to every four gallons—estimated—of the contents of the vault.

If chloride of lime is to be used, one gallon of *Standard Solution No.* 1 will be required for every gallon—estimated—of the material to be disinfected.

All exposed portions of the vault, and the woodwork above it, should be thoroughly washed down with the disinfecting solution.

To keep a privy-vault disinfected during the progress of an epidemic, sprinkle chloride of lime freely over the surface of its contents daily. Or, if the odor of chlorine is objectionable, apply daily four or five gallons of *Standard Solution No.* 2, which should be made up by the barrel, and kept in a convenient location, for this purpose.

Disinfection of Ingesta.—It is well established that cholera and typhoid fever are, very frequently, and perhaps usually, transmitted through the medium of infected water or articles of food, and especially milk. Fortunately we have a simple means at hand for disinfecting such infected fluids. This consists in the application of heat. *The boiling temperature maintained for half an hour kills all known disease germs.* So far as the germs of cholera, yellow fever, and diphtheria are concerned, there is reason to believe that a temperature considerably below the boiling point of water will destroy them. But in order to keep on the safe side it is best not to

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*See Preliminary Report of Committee on Disinfectants in *The Medical News* of March 28, 1885.

† One litre of sulphur dioxide weighs 2.9 grammes. To obtain ten litres of gas it is necessary to burn completely fifteen grammes of "flowers of sulphur" (Vallin).

trust anything short of the boiling point (212° F.) when the object is to disinfect food or drink which is open to the suspicion of containing the germs of any infectious disease.

During the prevalence of an epidemic of cholera it is well to boil all water for drinking purposes. After boiling, the water may be filtered, if necessary to remove sediment, and then cooled with *pure* ice if desired.

A sheet of filtering paper, such as druggists use, and a glass or tin funnel, furnishes the best means for filtering water on a small scale for drinking purposes. A fresh sheet of paper is to be used each day.

The above "Preliminary Report" has been prepared at the request of the *Sanitary Council of the Mississippi Valley*, as expressed in the following resolution adopted at its recent meeting in the city of New Orleans (March 10–11, 1885):

"*Resolved*, That the Secretary request from the Chairman of the Committee on Disinfectants, appointed at the last meeting of the American Public Health Association, a plain, practical paper on Disinfection and Disinfectants, for popular use and distribution, to be furnished to the Chairman of the special committee of this Council on General Sanitation."

GEORGE M. STERNBERG, Major and Surgeon U. S. A.,
Chairman Committee on Disinfectants.

THE MEDICAL ACT.

We publish the law passed by the last General Assembly, regulating the practice of medicine, which went into effect July 22, 1885. Like almost all new laws it is crude and loosely drawn, and does not clearly set forth the objects which it aims to accomplish. Its provisions were not well understood by the profession, and questions of every conceiveable character arose touching its various sections, such as, "What constitutes a reputable medical school?" "Is a physician required to take out a license in each county where he desires to practice?" "Can the County Clerk exercise judicial powers?" and many others, all of which were submitted to the Attorney General, and his opinions on the disputed points were obtained.

These decisions were published in the daily and weekly papers of the different counties. There was a general demand made by the better class of physicians representing the different schools of medicine, that this Board should undertake the enforcement of the law, although there was no provision in the law for such a supervision. After due deliberation, the Board decided to assume the responsibility, believing that Section 2 of the act creating the State Board of Health gave them authority to superintend the enforcement of any law which tended toward the protection of the health and lives of the citizens of the State. In accordance with this decision, the following letter of instructions to county health officers was issued, forwarding with the same a list of fraudulent medical schools in the United States and Canada:

INDIANAPOLIS, IND., August 19, 1885.

DEAR DOCTOR—It is the opinion of this Board that it is the duty of the county health officers, in accordance with Section 2 of the act establishing the State Board of Health, to see that the provisions of the medical law are strictly enforced. You will therefore examine the record of licenses kept by the County Clerk, and if any such have been procured without first complying with the law, or by fraudulent representation, or if any are practicing without license, you will cause the enforcement of the law. This is not intended to include reputable physicians who for sufficient reasons have been unable to comply with the law.

Yours truly,
C. N. METCALF, *Secretary.*

MEDICAL BILL.

AN ACT regulating the practice of medicine, surgery and obstetrics, providing for the issuing of licenses to practice, defining certain misdemeanors, and providing penalties.

[APPROVED APRIL 11, 1885.]

SECTION 1. *Be it enacted by the General Assembly of the State of Indiana*, That it shall be unlawful for any person to practice medicine, surgery or obstetrics in this State without first obtaining a license so to do, as hereinafter provided.

SEC. 2. Any person desiring to practice medicine, surgery or obstetrics in this State, shall procure from the Clerk of the Circuit Court of the county wherein he or she desires to practice, a license so to do, which license shall be issued to such person only when he or she shall have complied with the following conditions, to-wit: When such applicant shall file with such clerk his or her affidavit, stating that such applicant has regularly graduated in some reputable medical college, and shall exhibit to such clerk the diploma held by such applicant, or when such applicant shall file with such clerk his or her affidavit, and the affidavit of two reputable freeholders or householders of the county, stating that he or she has resided and practiced medicine, surgery and obstetrics in this State continuously for ten years immediately preceding the date of the taking effect of this act, stating particularly the locality or localities in which he or she practiced during said period, and the date and length of time in each locality, or when such applicant shall file with such clerk his or her affidavit, and the affidavit of two reputable freeholders or householders of the county, stating that he or she has resided and practiced medicine, surgery and obstetrics in this State continuously for three years immediately preceding the date of the taking effect of this act, stating particularly the locality or localities in which he or she practiced during said period, and the date and length of time in each locality, and that he or she had, prior to said date, attended one full course of lectures in some reputable medical college. Such applicant shall pay to such clerk for such license the sum of one dollar and fifty cents, and such clerk shall record such license, together with the name of the college in which such applicant graduated, and the date of his or her diploma, in a book to be kept for such purpose, and which shall be a public record.

SEC. 3. Any clerk who shall issue a license to practice medicine, surgery or obstetrics to any person who has not complied with the requirements of Section 2 of this act, shall be deemed guilty of a misdemeanor, and upon conviction thereof, shall be fined in any sum not less than twenty-five dollars nor more than one hundred dollars, and such license, or one procured by any false affidavit, shall be deemed and held to be void.

SEC. 4. Any person who shall practice medicine, surgery or obstetrics in this State, without having first procured from the Clerk of the Circuit Court of the county wherein he or she shall so practice, a license, as provided in this act, shall be deemed guilty of a misdemeanor, and upon conviction thereof, shall be fined in any sum not less than ten dollars nor more than two hundred dollars: *Provided*, That this act shall not be deemed to prohibit women from practicing obstetrics, and such midwives are hereby expressly exempted from its provisions.

SEC. 5. No cause of action shall lie in favor of any person for services as physician, surgeon or obstetrician, who had not, prior to the rendition of such services, procured a license to practice as herein provided for, and any person who shall pay any sum of money, or deliver any property for any such services to any person who is not so licensed, may recover the same, or the value thereof, in any court of competent jurisdiction in this State.

SEC. 6. The following shall be the form of license under this act; the Clerks of the Circuit Court shall appropriately fill up the blanks and issue the same under the seal of their respective courts, to-wit:

THE STATE OF INDIANA, } ss:
..............................COUNTY, }

I,................................., Clerk of the Circuit Court of ....county, in said State, do hereby certify that ....has complied with the laws of the State of Indiana, relating to the practice of medicine, surgery and obstetrics, and is hereby authorized to practice medicine, surgery and obstetrics in said county.

Witness my hand and seal of said court, this..........day of ....18....

OPINION OF ATTORNEY-GENERAL.

ATTORNEY-GENERAL'S OFFICE,
INDIANAPOLIS, June 25, 1885.

Dr. C. N. Metcalf, Secretary of State Board of Health:

SIR—You submit to me the following questions, and solicit answers thereto:

1. Can the General Assembly enact a law to regulate the practice of medicine?

The right of every person to pursue any lawful calling he may see fit, and to do so in his own way, not encroaching on the rights of others, is recognized in this country, subject to such restrictions as may be deemed necessary for the public welfare, and none other. (Ex Parte Spinney, 10 Nev. 323, 334.)

The General Assembly may require the possession of certain qualifications to entitle a person to pursue the medical profession.

The right to reasonably regulate the practice of medicine rests on the police power of the State, which extends to the protection of the lives, limbs, health, comfort and quiet of all persons within the State. It subjects persons and property to burdens and restraints, in order to secure the general comfort, health and property of the State. (Cooley Const. Lim., Side page 572, 573, 574.)

The vocation of the physician is laudable and lawful, and the right of any person to engage in it is subject to such restrictions only as the Legislature may reasonably impose, in the exercise of its general police power. Laws of this kind have been sustained by the courts, and held to be constitutional. (State vs. State Medical Examining Board, 23 Amer. L. Reg., 714; Fox vs. Washington Territory, 5 West Coast Reporter, 339; Ex Parte Spinney, 10 Nev., 323; State vs. Chung Gang, 16 Nev., 62; 20 Cent. L. Jour., 296, sec. 3; Holmes vs. Holde, 74 Me., 28;

Hewett vs. Charier, 16 Pick, 353; Logan vs. State, 5 Tex. App., 306; Antle vs. State, 6 Tex. App., 202; Musher vs. Chase, 29 Ohio St., 577; Wert vs. Clutter, 37; Ohio St., 347; State vs. Goldman, 44 Tex., 104; Hilliard vs. State, 7 Tex. App., 69; Ellison vs. State, 6 Tex. App., 248; Smith vs. Lane, 24 Hun., N. Y., 632 Bibber vs. Simpson, 59 Me., 181; Timmerman vs. Morrison, 14 John., 369; Allcot vs. Barber, 1 Wend., 526; Spaulding vs. Alford, 1 Pick, 33; Wright vs. Lancklin, 19 Pick, 288; Wood vs. O'Kelly, 8 Cush., 406; Thomson vs. Stoots, 15 Wend., 395; Thompson vs. Hazen, 25 Me, 104; Allcot vs. Barber, 1 Wend., 526; Smith vs. Tracy, 2 Hall, N. Y., 465; Baily vs. Mogg, 4 Den., 60; People vs. Monroe, 4 Wend., 200; Finch vs. Gridley, 25 Wend., 469; Marsh vs. Davidson, 9 Paige Ch, 580.)

Q. 2. "What constitutes a reputable Medical College under section 2 of the statute, and what evidence is required thereof?"

Sections 1 and 2 of said statute are as follows:

"SECTION 1. *Be it enacted by the General Assembly of the State of Indiana*, that it shall be unlawful for any person to practice medicine, surgery or obstetrics in this State, without first obtaining a license so to do, as hereafter provided.

"SEC. 2. Any person desiring to practice medicine, surgery or obstetrics in this State, shall procure from the Clerk of the Circuit Court of the county wherein he or she desires to practice, a license so to do, which license shall be issued to such person only when he or she shall have complied with the following conditions, to-wit: When such applicant shall file with such clerk his or her affidavit, stating that such applicant has regularly graduated in some reputable medical college, and shall exhibit to such clerk the diploma held by such applicant; or when such applicant shall file with such clerk his or her affidavit, and the affidavits of two reputable freeholders or householders of the county, stating that he or she has resided and practiced medicine, surgery and obstetrics in this State continuously for ten years immediately preceding the date of the taking effect of this act, stating particularly the locality or localities in which he or she practiced during said period, and the date and length of time in each locality, or when such applicant shall file with such clerk his or her affidavit and the affidavits of two reputable freeholders or householders of the county, stating that he or she has resided and practiced medicine, surgery and obstectrics in this State continuously for three years immediately preceding the date of the taking effect of this act, stating particularly the locality or localities in which he or she practiced during said period, and the date and length of time in each locality, and that he or she had prior to said date attended one full course of lectures in some reputable medical college. Such applicant shall pay to such clerk for such license the sum of $1.50, and such clerk shall record such license, together with the name of the college in which such applicant graduated, and the date of his or her diploma, in a book to be kept for such purpose, and which shall be a public record."

1. No particular school or system of medical practice is preferred by the law, and no rights are conferred upon one not accorded to all, and a practitioner in his treatment is to be tested by the general doctrines of his schools, and not by those of other schools and systems of medicine. (Bowman vs. Woods, 1 G. Greene, 44; Patten vs. Wiggins, 51 Me., 597; 59 Amer. Dec., 397; Corsi vs. Maretzek, 4 E D. Smith, 1; White vs. Carroll, 42 N. Y., 161-163.)

All recognized schools and systems of medicine stand equal before the law and equally reputable. The statute does not require the medical college to be incorporated from which the certificate or diploma is derived. (Holmes vs. Holde, 74 Me., 28-38.)

Every institution, whether incorporated or unincorporated, organized in good faith for scientific instruction in medicine, surgery or obstetrics, and in which such scientific instruction is systematically imparted, without regard to the school of medicine under whose control or management it is, is a reputable medical college within the meaning of the statute. (Holmes vs. Holde, 74 Me., 28, 38; State vs. State Examining Board, 23 Amer. L. Reg., 715; Ex Parte Spinney, 10 Nev., 323, 326; Patapsico Female Institution vs. Rock Hill College, 51 Md., 470.)

The graduation in, and diploma from a college, referred to by said statute, are not limited to an institution within the State of Indiana, or the United States.

2. Under the statute, when an applicant shall file with the clerk his or her affidavit, stating that such applicant has regularly graduated in some reputable medical college, and shall exhibit to such clerk the diploma held by such applicant, it becomes the duty of the clerk to issue to such applicant a license to practice his profession. This is the only condition prescribed by the statute and the officer can not require more from such applicant.

Q. 2. "Will the physician holding a certificate of membership of fifteen years tanding in a Homeopathic Medical Society of another State, and has had ten years, though not continuous, practice in Indiana, be entitled to a license to practice medicine in Indiana?"

A certificate of membership in a medical society confers no rights under the statute. The statute requires the clerk to issue a license to three classes of physicians.

1. Where the physician has graduated in some reputable medical college, and has received a diploma.

2. Where he has resided and practiced medicine, surgery and obstetrics in this State continuously for ten years immediately preceding the date of the taking effect of the statute.

3. Where he has resided and practiced medicine, surgery and obstetrics in this State continuously for three years immediately preceding the date of the taking effect of this act, and has attended one full course of lectures in some reputable medical college. The letter of the statute requires the applicant to have resided and practiced medicine, surgery and obstetrics in this State continuously for ten years. A similar statute has been sustained and held to be constitutional. (Exparte Spinney, 10 Nev., 323; State vs. State Medical Examining Board, 23 Amer. L. Reg., 714; Logan vs. State, 5 Tex. App., 306; Antle v. State, 6 Tex. App., 202 and other cases cited in connection with answer to question one.)

The letter of our statute also requires the applicant to have practiced medicine, surgery and obstetrics in this State continuously for ten years, immediately preceding the date of the taking effect of the statute. In Wert vs. Clutter (37 Ohio St., 347) it was held that such ten years of continuous practice may embrace time since as well as before the taking effect of the statute, but the statute in Ohio is unlike our statute on this subject.

In ex parte Spinney (10 Nev., 323) Beatty, J., held "that there is some reason for requiring ten years' practice in this State as a qualification for the continued practice of medicine and surgery, but there is no sort of reason for requiring that practice to have extended over the particular ten years 'immediately preceding the enactment of the law,' and to this extent the law is unconstitutional. To so decide, however, would leave a good and perfect statute, omitting only the words 'next preceding the passage of this act.'" In this latter proposition there was no concurrence by the other Judges, but Hawley, C. J., held said clause to be constitutional, and it is proper to follow the letter of the statute, which declares that the applicant must have resided and practiced medicine, surgery and obstetrics in this State continuously for ten years, immediately preceding the date of the taking effect of the statute, before a license may be issued. The term "continuous practice," in the sense of the statute, does not mean constant practice, never ceasing. (Bodfish vs. Bodfish, 105 Mass., 319; Wood vs. Sutcliff, 8 English L. and E., 220.)

It is not necessary that a physician should have a patient each day during the ten years immediately preceding the operation of the statute to have been in continuous practice and to obtain a license.

No criterion can be established on the basis of the quantity of business enjoyed by a physician to determine whether he has or not continuously practiced his profession for said time.

If for said time the practice of medicine, surgery and obstetrics has been his profession and business, and he has not wholly abandoned it for another occupation, and he has practiced his profession as often as he has had requests and occasion to do so, I think he may be deemed to have continuously practiced medicine, surgery and obstetrics for ten years immediately preceding the operation of the statute, and he is entitled to a license.

Q. 3.—"Is a certificate of membership from either State Medical Society of this State sufficient to entitle the holder to a license to practice medicine in the State, provided the holder has never attended a medical school, and has not been in continuous practice in the State for ten years previous to the taking effect of the medcal act?"

A.—No.

Q. 4.—"Does the statute apply to a person who undertakes to cure diseases by manipulating the patient's body by rubbing, kneading and pressure?"

A.—The statute applies to persons desiring to practice medicine, surgery and obstetrics only, and it ought not to be so construed as to cover persons not substantially within its terms. (Smith vs. Lane, 24 Hun. 632; Wert vs. Clutter, 37 Ohio St., 347–352.)

In Wert vs. Clutter, *supra*, the Court says: "This statute was not intended to create a right in any one to practice medicine. It was simply intended to prohibit the exercise of the right (which before was universal) by unqualified persons. The right remains in all persons, except those from whom it is taken away by the statute."

In Bibber vs. Simpson (59 Me., 181) suit was instituted for $51 for services rendered the defendants intestate, at his special request, by the plaintiff as a clairvoyant.

It appeared from the plaintiff's testimony that she professed to be a clairvoyant; that when asked to examine the patient she saw the disease and felt as the patient did; that sittings or seances were of different durations, from one-quarter to one-half of an hour each; that she did not pretend to understand medicine or anatomy; that she was requested by the intestate to visit him and render him professional services, and did so as by the account; that she helped him, but he died from taking cold; acquainted him with the prices, and he agreed to pay them, but never did.

Appleton, C, J., in deciding the case, says: "The services rendered are medical in their character. True, the plaintiff does not call herself a physician, but she visits her sick patients, examines their condition, determines the nature of the disease and prescribes the remedies deemed by her most appropriate. Whether the plaintiff calls herself a medical clairvoyant, or clairvoyant physician, or a clear-seeing physician, matters little; assuredly, such services as the plaintiff claims to have rendered, purport to be, and are to be deemed, medical, and are within the clear and obvious meaning of R. S., 1871, c. 13, Sec. 3, which provides that "no person, except a physician or surgeon, who commenced prior to February 16, 1831, or has received a medical degree at a public medical institution in the United States, or a license from the Maine Medical Association, shall recover any compensation for medical or surgical services, unless previous to such services he had obtained a certificate of good moral character from the municipal officers of the town where he then resided." The plaintiff has not brought herself within the provisions of this section, and can not maintain this action.

In Smith vs. Lane (24 Hun., 632), Daniels, J., says: "The action was brought to recover the price which it was alleged the defendant agreed to pay the plaintiff for the treatment of himself and wife for certain bodily disabilities. It consisted entirely of manipulations with the hands. It was performed by rubbing, kneading and pressure. The evidence given by the plaintiff was to the effect that he was employed by the defendant to perform these services for a specific compensation, and that he had performed them until the amount due him was the sum of $149. Upon the close of the case on his part, the referee dismissed the complaint because it appeared that the plaintiff was not a graduate of any medical school, and had no license permitting him to practice either medicine or surgery. The direction was given because of the prohibition contained in Chapter 436 of the laws of 1874, and, as no other reason appeared in the case, or the evidence which was given, that would prevent the plaintiff from recovering, and whether this act contains anything subjecting him to such disability, is the only substantial point which requires to be considered in the case. The statute in terms merely declared it to be a misdemeanor for any person to practice medicine or surgery who is not authorized to do so by a license or diploma from some chartered school, State Board of Medical Examiners or Medical Society, or who shall practice under cover of a medical diploma illegally obtained, and for the purpose of qualifying a person neither licensed nor possessing a diploma of the nature of that mentioned to practice medicine or surgery, it was provided that he should obtain a certificate from the censors of a medical society either in the county, district or State, in which it should be set forth that he had been found qualified to practice all the branches of the medical art mentioned in it. It appears to be quite manifest that the object of the Legislature in the enactment of this chapter was only for regulating the practice of medicine or surgery, as those terms are usually or generally understood, and confining them to such significance, it is evident that they would not include the occupation of the plaintiff. The practice of medicine is a pursuit very generally known and understood, and so also is that of surgery. The former includes the application and use of medicines and drugs for the purpose of curing, mitigating or alleviating bodily disease, while the functions of the latter are limited to manual operations usually performed by surgical instruments or appliances. It was entirely proper for the Legislature by means of this chapter to prescribe the qualifications of the persons who might be intrusted with the performance of these very important duties. The health and safety of society could be maintained and protected in no other manner.

"To allow incompetent or unqualified persons to administer, or apply medical agents, or to perform surgical operations, would be highly dangerous to the health as well as the lives of the persons who might be operated upon, and there is reason to believe that lasting and serious injuries as well as the loss of life have been produced by the improper use of medical agents and surgical implements and appliances. It was the purpose and object of the Legislature by this act, to prevent a continuance of deleterious practices of this nature, and to confine the uses of medicine and the operations of surgery to a class of persons who, upon examination, should be found competent and qualified to follow their professional pursuits. No such danger could possibly arise from the treatment to which the plaintiff's occupation was confined. While it might be no benefit, it could hardly be possible that it could result in harm or injury, and for that reason no necessity existed for interfering with this pursuit by any action on the part of the Legislature. His system of practice was rather that of nursing than of either medicine or surgery. No bodily disability or diseases could either result from or be aggravated by the applications made by him, and what he did in no just sense either constituted the practice of medicine or surgery. He neither gave or applied drugs or medicine, nor used surgical instruments."

It is my opinion that our statute is susceptible of the same construction expressed in said case of Smith vs. Lane, and that our statute does not cover the person embraced by your question, and that he is not required to procure a license.

Q. 5.—"Must women practicing obstetrics take out a license?"

A.—No. Women practicing obstetrics are expressly exempted from the operation of the statutes.

Respectfully,

FRANCIS T. HORD,
Attorney-General.

ATTORNEY GENERAL'S OFFICE,
INDIANAPOLIS, August 11, 1885.

Dr C. N. Metcalf, Secretary of the State Board of Health:

SIR—You request an answer to the questions:

1. "Can the Clerk of the Circuit Court exercise judicial powers under the Medical Act, approved April 11, 1885, Acts 1885, page 197?"

Answer: No. The clerk is a ministerial officer only. (Gregory vs. State, 94 Ind. 384; Gulick vs. New, 14 Ind. 93.)

The constitution declares that judicial powers shall be vested in courts and not in ministerial officers, and a statute conferring such power on the Clerk of the Circut Court would be unconstitutional. (M. Gregory vs. State, 94 Ind. 384; Hall vs. Marks, 34 Ill. 358; Shoultz vs. McPheters, 79 Ind. 373, 375, 377; Flournoy vs. Jeffersonville, 17 Ind. 169; Chandler vs. Nash, 5 Mich. 409.)

The clerk can perform such ministerial acts only, directed by the statute, and in the manner therein prescribed.

If a person pretending to be a physician should present an affidavit and a diploma that was not in fact issued by a reputable medical college, but acquired by purchase or fraud, and without the usual study required by a reputable institution, and the clerk shall know such fact and refuse to issue a license to such person, and a mandate should be issued by a court of competent jurisdiction against the clerk to compel him to isuue such license, I think it would be proper for the court in the interest of justice and law to investigate such fraud, and determine the right of the party. A person making a false affidavit to procure a license would be liable to prosecution for perjury.

2. "If a physician's practice extends into two or more counties, is a license from the clerk of the county in which he lives sufficient, or is he required to procure a license in each county in which he proposes to practice?"

A.—Section 2 of said Statute provides, "any person desiring to practice medicine, surgery or obstetrics in this State shall procure from the Clerk of the Circuit Court of the county wherein he or she desires to practice a license so to do."

Section 4 declares that any person who shall practice medicine, surgery or obstetrics in this State without having first procured from the Clerk of the Circuit Court of the county wherein he or she shall so practice a license, as provided in this act, shall be deemed guilty of a misdemeanor."

The form of the license prescribed by Section 6 of the statute is as follows:

THE STATE OF INDIANA, ———— County.

I, —— ——, Clerk of the Circuit Court, do hereby certify that —— —— has complied with the laws of the State of Indiana relating to the practice of medicine, surgery and obstetrics, and is hereby authorized to practice medicine, surgery and obstetrics in said county."

The letter of the statute requires a physician to procure a license in each county in which he proposes to carry on his regular and customary business. It is not for me to say that such regulation of the practice of medicine is unreasonable or unconstitutional. (College of Physicians vs. Levett, 1 Ld. Raym. 472; College of Physicians vs. West, 10 Mod. 353; College of Physicians vs. Rofe, 6 Mod. cases 44.)

There is a competent judicial tribunal to which persons feeling themselves aggrieved may appeal to adjudicate its validity and construe its terms.

Sometimes it occurs that physicians eminent in their profession are required to act beyond the territorial limits of their regular and usual business in cases of illness or casualty, where the disease is so active and fatal in its tendency, or the accident so serious and menacing in its nature as to require the immediate and prompt exercise of professional skill before the physician can proceed to some distant county seat, produce his evidence of qualification, and procure a license.

I do not think that the statute could reasonably be construed as a prohibition of the performance of medical service under such circumstances.

If a physician who has procured a license in one county in this State, and thereby lawfully declared to be qualified to practice his profession in this State, should be required to attend and render professional service in a single transaction in case of emergency, in another and different county in which he has precured no license, I do not think his act would be unlawful. (Cooper Manfg. Co. vs. Ferguson, 113 U. S. R., 727, 734, 735; Potter vs. Bank of Ithica, 5 Hill, 490; Suydam vs. Morris Canal and Banking Co., 6 Hill, 217.)

The statute is very stringent in many of its provisions, but it is my province and duty as the law officer of the State to adopt its terms until otherwise construed by the courts.

Q. 3.—"Is $1.50 all that a County Clerk may charge for a license, or is he entitled to an additional fee?"

A.—The statute has fixed the tribunal and prescribed an easy and summary way for the determination of such questions.

"Any officer being in doubt of the proper charge to be made for any service rendered shall in no case charge any constructive fee, but he shall bring the question before the Circuit Judge of his county in writing, and said Judge shall decide the same, which decision shall be entered of record as other orders of Court are entered. A note thereof showing the page of the order book shall be entered in the list of fees kept in the office of such officer, which order shall authorize such charge to be made as found by the Court." (R. S. 1881, Sec. 6,029.)

This course has been pursued in many counties, without much harmony as to conclusions on the subject, and it is not proper for me to give any official opinion on the question, but its decision should be left with the tribunal where the statute lodges it.

Respectfully,

FRANCIS T. HORD,
Attorney-General.

ATTORNEY-GENERAL'S OFFICE,
INDIANAPOLIS, October 26, 1885.

Dr. C. N. Metcalf, Secretary of the State Board of Health:

SIR—You submit to me this question: "Can a physician, who practiced medicine, surgery and obstetrics, for three years continuously immediately preceding the taking effect of the act regulating the practice of medicine, approved April 11, 1885, attend a course of lectures after the taking effect of the law, and be entitled to receive a license to practice medicine, surgery and obstetrics?"

The statute renders it unlawful for any person to practice medicine without first obtaining a license so to do. (Act 1885, p. 197.)

A person may obtain a license if he has a diploma from a reputable medical college, or has resided and practiced medicine, surgery and obstetrics in this State continuously for three years immediately preceding the date of the taking effect of the act, and, prior to said date, has attended one full course of lectures in some reputable medical college, or if he has practiced medicine within this State for ten years before the passage of the act. (Acts 1885, p. 197, 198.)

Article 5 of the Constitution of the United States declares "that no one shall be deprived of life, liberty or property without due process of law."

The Fourteenth Amendment to the Constitution of the United States declares that no State "shall deprive any person of life, liberty or property without due process of law, nor deny to any person within its jurisdiction the equal protection of the laws."

The bill of rights in the Constitution of the State of Indiana says: "We declare that all men are created equal; that they are endowed by their Creator with certain unalienable rights; that among these are life, liberty and the pursuit of happiness." (R. S. 1881, sec. 46.)

"No man's property shall be taken by law without just compensation, nor, except in case of the State, without such compensation being first assessed and tendered." (R. S. 1881, sec. 66, Art. 1, sec. 21.)

Under these constitutional safe-guards, there is no proposition more firmly settled than that it is one of the fundamental rights and privileges of every American citizen to adopt and follow such lawful profession or employment, not injurious to the community, as he may see fit, subject only to constitutional regulation and restrictions. (The Live Stock, etc., Association, vs. The Crescent City Company, 1 Abb. U. S. Cir. Ct. R. 388; 21 Cent. L. Jour., 337, 339; Bertholf vs. O'Reilly, 74 N. Y. 515; Slaughter House Cases, 16 Wall, 36, 106; In re Jacobs, 98 N. Y. 98.)

In Live Stock Association vs. The Cresent City Company, 1 Abb. U. S. C. 388, the court say:

"But so far as relates to the question in hand we may safely say it is one of the privileges of every American citizen to adopt and follow such lawful industrial pursuit, not injurious to the community, as he may see fit, without unreasonable regulation or molestation, and without being restricted by any of those unjust, oppressive and odious monopolies or exclusive privileges which have been condemned by all free governments. It is also his privilege to be protected in the possession and enjoyment of his property so long as such possession and enjoyment are not injurious to the community, and not to be deprived thereof without due process of law.

"These privileges can not be invaded without sapping the very foundations of republican government. A republican government is not merely a government of the people, but it is a free government. Without being free, it is republican only in name, and not republican in truth, and any government which deprives its citizens of the right to engage in any lawful pursuit, subject only to reasonable restrictions, or at least subject only to such restrictions as are reasonably within the power of government to impose—is tyrannical and unrepublican. And if to enforce arbitrary restrictions, made for the benefit of a favored few, it takes away and destroys the citizen's property without trial or condemnation, it is guilty of violating all the fundamental privileges to which I have referred, and one of the fundamental principles of free government. There is no more sacred right of citizenship than the right to pursue unmolested a lawful employment in a lawful manner. It is nothing more nor less than the sacred right of labor."

The Supreme Court of the United States in 16 Wall. 36, 106, quote the above proposition with approbation.

In Bertholf vs. O'Reilly (74 N. Y. 515) the Court say:

"Liberty, in its broad sense, as understood in this country, means the right not only of freedom from servitude, imprisonment or restraint, but the right of one to use his faculties in all lawful ways, to live and work where he will, to earn his livelihood in any lawful calling, and to pursue any lawful trade or vocation."

The right to reasonably regulate the practice of medicine rests on the police power of the State, which extends to the protection of the health and lives of all persons within the State, which subject I have considered in an opinion heretofore given to you. Chief Justice Shaw, in discussing the subject of the police power, in Commonwealth vs. Alger (7 Cush. 85), said: "It is much easier to perceive and realize the exisitence and source of this power than to mark its boundaries or prescribe limits to its exercise." It is undoubtedly difficult to determine the exact limits to the exercise of this power, but it is well settled that it belongs to the Legislatures of the several States, and forms a part of the mass of residuary State powers over which Congress has do direct control. (1 Kent Com. 439; Slaughter House Cases, 16 Wall. 36–63; License Tax Cases, 5 Wall, 462–470.)

The fourteenth amendment of the Constitution of the United States does not impair the police power of the State on this subject. (Barbier vs. Connolly, 113 U. S. R. 27; Soon Hing vs. Crowley, 113 U. S. R. 703; the Live Stock Association vs. the Crescent City, 1 Abb. U. S. R. 388; Slaughter House Cases, 16 Wall, 36; Munn vs. Illinois, 94 U. S. R. 113.)

It is the prerogative of the Legislature to prescribe regulations founded on nature, reason and experience for the due admission of qualified persons to professions and callings demanding special skill and confidence. (23 Amer. L. Reg., 714; State vs. State Medical Examining Board, 32 Minn., 324; Bradwell vs. the State, 16 Wall, 130–142; In re Charles Taylor, 48 Md., 28; the Live Stock Association vs. the Crescent City Company, 1 Abb. U. S R., 388–400. See also authorities cited in my former opinion on this subject.)

In Live Stock Association vs. the Crescent City Company (1 Abb. U. S. R., 388–400) the Court says: "This fundamental right of labor is not inconsistent with that large class of cases in which the laws require a license or a certificate of requisite qualifications for admission to a particular employment or profession. No doubt there are many such as to which the interests of society require that due preparation should be made, and due qualifications should be possessed before a person shall be allowed to enter them." While generally it is for the Legislature to determine what laws are required to protect and secure the public health, comfort and safety as police regulations, it may not arbitrarily infringe upon personal or property rights, and its determination as to what is a proper exercise of the power is not final and conclusive, but is subject to the scrutiny of the Courts. When, therefore, the Legislature passes an act ostensibly for the public health, but which does not relate to, and is inappropriate for the purpose, and which destroys the property or interferes with the rights of the citizen, and is not a reasonable regulation, it is within the province of the Court to determine this fact, and to declare the act violative of the Constitutional guaranties of those rights. (In re Jacobs 98 N. York, 98; 21 Cent. L. Jour., 337; Live Stock Association vs. The Crescent City Co., 1 Abb. U. S. R., 388.)

The confidence of a community, good will, the right to pursue his vocation by a qualified physician, who has practiced his profession for three or nine years, although he may have no diploma, and may not have attended one full course of lectures in a reputable medical college, is his property. The Legislature may make qualification a test and condition for license to practice medicine. Whether or not a law operating retrospectively, affecting physicians who have regularly practiced their profession within this State for three or more years before its passage, depriving them of their occupation and the emoluments of their established business, without reference to or test of their learning, knowledge, qualifications and fitness for their profession, can be regarded as a reasonable regulation of the practice of medicine and a proper exercise of the police power, and constitutional, is a very close question and ought to be settled by the courts. As the law officer of the State I do not feel at liberty to pass upon the question, but I must adhere to the plain terms of the statute, which answers your question in the negative. If, however, a physician has so advanced in his profession by study and experience, that his knowledge so derived would enable him to obtain a diploma from a reputable medical college after one full course of lectures, such diploma would entitle him to a license and the right to practice his profession. Under the statute a diploma from a reputable medical college authorizes a license to the holder, and the statute making the diploma conclusive evidence of the learning, qualifications and fitness of the possessor, is constitutional and valid. (In re Cooper, 22 N. Y., 67.)

Respectfully,

FRANCIS T. HORD,

Attorney-General.

LIST OF PHYSICIANS.

Abbreviations.—A., for accoucheur; E., for eclectic; H., for homeopathic; P. M., for physio-medical; R., for regular; N. R., for not reported; D., for diploma; figures, number of years' practice.

This list is copied from the reports of County Health Officers, and any mistakes that may occur are attributable to them.

The name of the County Health Officer is printed in capitals.

Adams County.

Name.	*Post Office.*	*School.*
Aspy, H. M	Geneva	R. 3
Boyers, J. S.	Decatur	R. D
Broadwell, W.	Berne	R. D
Coverdale, J. S	Decatur	R. D
Christy, S. K	Decatur	R. D
Dorwin, D. T	Decatur	R. 3
Freeman, B. R	Decatur	R. D
Ford, A. C	Geneva	E. 3
Holloway, A. G.	Decatur	R. 3
Haughton, A	Linn Grove	R. 10
Hughes, A	Monroe	P. M. 10
Hill, J. C	Pl't Mills	P. M. 10
Harper, J. L	Pl'nt Mills	R. 10
JELLEFF, C. A	Decatur	R. D
Kuntz, Christina	Berne	P. M. 10
McMellen, W. W. P	Decatur	R. D
McDowell, J	Geneva	R. 10
Mann, J. E	Decatur	H. D
Mann, S. H	Decatur	H. D
Mendenhall, F. F	Linn Grove	R. 3
Ralston, S. G	Geneva	R. 3
Ranner, C. L	Monroe	R. 10
Sprunger, P. A	Berne	H. 10
Stuart, S. M.	Geneva	R. D
Thomas, P. B.	Berne	R. D
Trout, D. S. M	Decatur	R. D
Walser, J. A	Linn Grove	R. 3

Regular, 20; Eclectic, 1; Physio-Medical, 3: Homeopathic, 3.

Allen County.

Adams, Horace E	Woodburn	R. 10
Bilderback, John W	Harlan	R. 10
Bolan, Milton J	Butler	R. 10
Blade, Philip	Fort Wayne	E. D
Bowen, Geo. W	Fort Wayne	H. D
Brueback, Geo. T	Fort Wayne	R. D
Chambers, John D	Fort Wayne	R. D
Connelly, William A.	Monroeville	R. D
Cosgrove, Franklin K.	Harlan	R. D
Chandler, George E	Fort Wayne	H. D
Dills, Thomas J	Fort Wayne	R. D
Dinnen, James M	Fort Wayne	R. D
Emanuel, Jonas	Spencerville	R. D
Engle, Ammiel	Monroeville	R. 10
Fiser, Charles M	Fort Wayne	R. D
Ferguson, Wm. T.	Fort Wayne	R. D
Greenwell, Franklin	Huntertown	R. D
Greenewalt, Geo. L.	Fort Wayne	R. D
Gould, Harry	Fort Wayne	R. D
Guenther, John W	Fort Wayne	R. 10
Gordon, Charles W	Wallen	R. D
Green, M. Francis	Fort Wayne	H. D
Gard, Brookfield	Fort Wayne	E. D
Gregg, James S.	Fort Wayne	R. D
Heaton, Charles E	Hoagland	R D
Heull, Jacob	Fort Wayne	E. D
Harris, Lyman P	Fort Wayne	H. D
Jones, Joseph H	Fort Wayne	N. R. 10
Knode, Robert S	Fort Wayne	R. D
Kryder, John L.	Cedarville	R. D
Lipes, Robert F.	Heller's Corners	R. D
Leiter, Charles A.	Monroeville	R. D
Laubach, A. J	Fort Wayne	R. D
Myers, Isaac N	Maples	R. D
Myers, Herschel S	Fort Wayne	R. D
Myers, W. H	Fort Wayne	R. D
McDowell, Hiram C	Arcola	R. 10
McCausland, J. W	Fort Wayne	R. D
Metcalf, Sam. C.	Fort Wayne	R. D
McCormick, Thos. H	Poe	R. D
McHenry, J. D	Maples	R. D
McCaskey, Geo. W	Fort Wayne	R. D
Mentzer, Simeon E	Fort Wayne	R. D
Murphy, Geo. R	Spencerville	R. D
Martz, Christian	Fort Wayne	H. D
McCullough, T. P.	Fort Wayne	R. D
McCullough, Howard	Fort Wayne	R. D
Morgan, Joseph D	Fort Wayne	E. D
Nieschang, C. F. C	Fort Wayne	R. D
Null, Lycurgus S.	New Haven	E. D
Omo, Joseph H	Harlan	R. D
Payton, Lewis	Fort Wayne	P. M. D
Proegler, Carl	Fort Wayne	R. D
Poyneer, Geo. W	Fort Wayne	R. D
Ross, Geo. A	Fort Wayne	H. D
Rosenthal, Isaac M.	Fort Wayne	R. D
Reed, Ezra L	Fort Wayne	R. 10
Ruhl, DeLa William	Sheldon	R. D
Searls, Joseph D	Fort Wayne	N. R. 10
Smith, Joseph L	Hoagland	E. D
Stemen, C. B	Fort Wayne	R. D
Seaton, John R.	Fort Wayne	R. 10
Shutt, Lewis C	Fort Wayne	R. D
Siver, Emmet L	Fort Wayne	R. D
Shutt, John M	Harlan	N. R. 3
Swift, Clarence F.	Fort Wayne	R. D
Sledd, Samuel D	Nine Mile	R. D
Smith, Cornelius S.	Fort Wayne	R. D
SWERINGER, HIRAM VON	Fort Wayne	R. D
Thayer, Frederick	Fort Wayne	R. D
Van Buskirk, A. E	Fort Wayne	R. D
Virgil, Thomas S.	Fort Wayne	R. D
Whery, William P	Fort Wayne	R. D
Woodworth, B. S	Fort Wayne	R. D
Williamson, M. F	New Haven	R. D
Wheelock, Kent K	Fort Wayne	R. D
Worley, Geo. N.	Poe	R. D
Wagner, Henry G	Fort Wayne	N. R. 10
Wagner, Amelia	Fort Wayne	N. R. 10
Young, John W.	Fort Wayne	R. D

Regular, 62; Eclectic, 6; Homeopathic, 6; Physio-Medical, 1; not reported, 5.

Bartholomew County.

Name.	*Post Office.*	*School.*	*Name.*	*Post Office.*	*School.*
ARWINE, J S	Columbus	R. 10	Lopp, Wm. H	Columbus.	R. D
Armer, D. S.	Columbus	R. D	Lawrence, W. M	Jonesville.	E. 3
Allen, W. H	Waymansville	R. 10	Linton, S. M	Columbus	R. 10
Butler, Wm. H	Columbus	R. D	Martin, T. J	Jonesville	P. M. D
Biddinger, S. W	Waynesburg	E. 10	Moore, C. E.	Columbus	E. D
Banker, A. J	Columbus	R. D	Minnett, O. H	Jonesville.	R. D
Beck, Wm. H.	Hartsville	R. D	McLeod, A. J.	Columbus	R. D
Boyington, C. H	Hope	R. D	McCoy, G. T	Columbus	R. D
Barrett, S. J	Columbus	R. 3	Morris, S. H	Columbus	R. 3
Butler, Chas. H	Clifford	R. 10	Norton, F. D	Petersville	R. D
Banks, W. H	Waymansville	R. 10	Newton, W. T	Hope	R. D
Carmichael, W. T	Walesboro	P. M. D	Riley, J. Jos	St. Louis Crossing	R. D
Crisler, J. B	Newbern	R. 10	Rice, Alf	Columbus.	H. D
Cosby, G. O.	Burnesville	R. D	Roope, R. H	Columbus	R. D
Clark, I. S	Columbus	R. 10	Shane, T. A	Columbus.	H. D
Davis, Jos. H.	Azalia	R. 10	Smalley, J. K	Hartsville.	R. D
Elrod, M. N	Hartsville	R. D	Stapp, S	Hope	R. 10
Falk, Fred	Columbus	R. 3	Smith, T. E	Columbus	R. 3
Galloway, C. E	Hartsville	R. D	Summers, J. M	Columbus.	R. 10
Hudson, J. B	Columbus	E. D	Thompson, D. A	Elizabethtown	R. D
Howe, O. E	Taylorsville.	R. D	Voris, S. M.	Columbus	R. D
Hawzer, Z. H	Columbus.	R. D	Weisenberg, Jos	Waymansville	R. 10
Hawley, K. D.	Elizabethtown	R. D	Williams, J. B	Clifford	P. M. D
Holder, R. E	South Bethany	R. D	Wright, J. F	Columbus.	R. D
Kincaid, S. F	Walesboro.	E. D	Winterrowd, N. S	Hope	R. D

Regular, 40; Eclectic, 5; Homeopathic, 2: Physio-Medical, 3.

Benton County.

Boice, A. C	Earl Park	R. 3	Hard, Addison D	Ambia	R. D
Boice, Benj. R	Earl Park	R. D	Johnson, Friedley P	Earl Park	R. D
Bristow, Joseph	Templeton	R. 3	Kinney, John Fenton	Oxford	E. D
Beard, J. M. G	Ambia	R. D	Kolb, Jonathan	Oxford	R. 10
Christley, J. B	Boswell	R. 10	MAVITY, JAMES S	Fowler	R. D
Cook, Clark	Fowler	R. D	McConnell, Henry C	Oxford	E. D
Fall, Charles W	Templeton	R. 3	Purdy, A. J	Fowler	R. D
Green, Nellie E	Fowler	R. 3	Roberts, Samuel R.	Atkinson	R. 10
Green, John W.	Boswell	R. 3	Rodman, James M	Fowler	R. 10
Gray, James A	Otterbein	R. D	Wells, Allen W.	Oxford,	R. D
Gray, William H.	Goodland	E. D	Whitcomb, James H	Boswill	R. 3
Hunter, Abraham F	Raub	E. D			

Regular, 19; Eclectic, 4.

Blackford County.

Anderson, J. M.	Dunkirk	H. 10	McFarland, J. E	Mill Grove	E. 10
DAVISSON, H. C	Hartford City	R. D	Paul, Ph. D.	Hartford City	E. D
Drayer, Peter.	Hartford City	R. D	Sage, Jno. W	Hartford City	E. D
Harrold, Jno. R	Roll	R. D	Sellers, Jno	Montpelier	R. D
Landon, L. C	Priam	R. 10	Wheeler, Wm. H	Hartford City	H. 10
Mason, C. R.	Hartford City	R. D	Wilt, W. W	Montpelier	R. D
Morrison, Jno. A	Montpelier	R. D	White, Robt	Montpelier	H. 10

Regular, 8; Eclectic, 3: Homeopathic, 3.

Brown County.

Browning, Nathan	Needmore	R. 3	RALPHY, A. J.	Nashville	R. D
Genolin, J. F	Nashville	R. D	Spencer, A. C.	Bean Blossom.	R. D
Griffitt, A. S	Story	R. D	Taggart, C. T	Nashville	R. 10
Leonard, J. H	Elkinsville	R. 10	Wilson, S. C	Pike's Peak	R. 10
Moser, J. P	Spearsville	R. D	Warring, T. E	Belmont.	R. 3
Mossiss, Stephen	Schooner	R. D	Ward, J. G	Bean Blossom.	R. 3

Regular, 12.

Carroll County.

Name.	*Post Office.*	*School.*
Angell, Charles	Pittsburg	R. D
Angell, C. E	Delphi	R. D
Armstrong, Ellis W	Camden	R. D
Armstrong, F. G	Camden	R. 10
Beck, E. W. H	Delphi	R. D
Blanchard, J. R	Delphi	R. D
Bradfield, B. D	Deer Creek	R. D
Camp, Charles	Camden	E. D
Chittick, Charles	Burlington	R. D
Conway, Patrick W	Ockley	R. D
Cook, Andrew J	Flora	E. D
Cromer, J. R	Flora	E. D
Doane, George M.	Burlington	R. 10
Greer, Joshua G	Patton	P.-M. 10
Herron, R. D	Cutler	R. 10
Jackson, C. P.	Pyrmont.	R. 10
Kelsey, J. S.	Cutler	R. D
Kennard, J. L.	Yeoman	R. D
Landes, Benj. F	Burlington	E. D
Loop, Wm. M.	Deer Creek	R. D
Lyon, F. P	Carroll P. O	R. D
Moore, A. G.	Carroll P. O	R. 10
Morrow, James L.	Delphi	R. D
Noland, S. T	Delphi	R. D
Nice, P. F.	Deer Creek	R. D
Plank, Wm. H	Deer Creek	R. D
Robinson, Frank H	Delphi	H. D
Scholl, Charles E.	Camden	R. D
Sharrer, W. F.	Delphi	R. D
Smith, Wickliffe	Delphi	R. D
Snyder, Benj. F.	Burrows.	R. D
Souder, Cloyd L	Burrows.	R. D
Stewart, J. Wilson	Rockfield	R. D
Shultz, F. A	Delphi	E. D
Shultz, J. J	Delphi	E. D
Tidrick, R. R	Bringhurst	R. D
Trobaugh, Wm. A	Cutler	R. D
WALKER, EDW'D	Delphi	E. D
Wilson, Robert I	Lockport	R. 10
Wirt, J. H	Flora	E. D
Wright, John A.	Burlington	E. D

Regular, 30; Eclectic, 9; Homeopathic, 1.

Cass County.

Abbott, Abner	Logansport	E. D
Adrian, James	Logansport	R. D
Baldwin, Thornberg	Galveston	R. 10
Ballard, J. W.	Logansport	R. D
Ballou, A. B	Burnettsville	R. D
Banta, H. J	Logansport	R. D
Bell, W. H	Logansport	R. D
Blair, Jno. M.	Logansport	R. D
Brown, N.	Young America	E. 3
Burton, J. J	Royal Centre	E. D
Busjahn, F. A	Logansport	R. D
Cady, N. W.	Logansport	R. D
Carpenter, L. W	Logansport	H. D
Chord, A. M	Logansport	E. D
Coleman, A.	Logansport	R. D
Clevenger, B. S	Logansport	E. 10
Downey, J. A.	Logansport	E. D
Dutchess, C. P	Walton	R. D
Eckert, D. H	Logansport	E. D
Fitch, G. N	Logansport	R. D
Fouts, D. N.	Royal Centre	E. 3
Hallaman, Joseph	Logansport	R. D
Hattery, H. D	Logansport	R. D
Herman, John	Logansport	R. D
Henry, L. W	Burnettsville	E. 10
Holloway, J. W.		E. D
Hunter, William B	Anoka	R. D
IRONS, J. W	Logansport	H. 3
Jones, A. B	Burnettsville	R. D
Jordan, M. A.	Logansport	E. D
Justice, James M.	Logansport	R. D
Landrey, S. F.	Galveston	R. 10
Lester, H. C.	Logansport	R. D
Loop, Z. U	Galveston	R. D
Lybrook, W. E	Young America	R. D
Lynas, J. B	Logansport	E. 10
Mann, J. E		H. D
Million, David	Royal Centre	E. D
Myers, Alpheus.	Logansport	E. D
Noff, J. N.	Walton	R. D
Parks, Charles D	Young America	E. D
Pickett, Cyrus	Pine	E. D
Pickett, J. J	Dow	E. 3
Powell, J. Z.	Logansport	R. D
Quick, L. L.	New Waverly	R. D
Quick, R. H.	New Waverly	R. D
Rolshausen, E	Logansport	R. D
Shultz, J. H.	Logansport	E. D
Shultz, J. B.	Logansport	E. D
Simmon, L. A	Galveston	R. 3
Skinner, H. D	Twelve Mile	R. D
Smith, J. S	Galveston	E. D
Sterrett, J. E.	Logansport	R. D
Stevens, B. C	Logansport	R. D
Stolze, J	Logansport	E. D
Talbott, J. W.	Logansport	R. D
Taylor, Caroline	Logansport	E. 3
Taylor, J. L.	Logansport	E. D
Thomas, C. L	Logansport	R. D
Thomas, James.	Royal Centre	R. 10
Williams, J. A	Logansport	R. D
Wills, J. B	Lincoln	R. D

Regular, 36; Eclectic, 23; Homeopathic, 3.

Clark County.

Allhands, David S	N. Washington	E. 10
Adair, Samuel L	N. Washington	R. D
Bossard, Clemons	Jeffersonville	H. D
Beckwith, Lod W	Jeffersonville	R. D
Bryant, Allen	Jeffersenville	N. R. 10
Crosby, Mary		N. R. 3
Coombs, David H	Charlestown.	R. D
Covert, Geo. M	Sellersburg	R. D
Duerson, Wm. F	Bethlehem	R. 3
Fouts, William D	Jeffersonville	R. D
Field, Nathaniel	Jeffersonville	R. D
Field, Davis L	Jeffersonville	R. D
Ferguson, Henry H	Henryville	R. D
GRAHAM, THOS. A	Jeffersonville	R. D
Haymaker, Geo. W	Charlestown	R. D
Hauss, Augustus P.	Sellersburg	E. D
Jones, Cad. W	N. Washington	R. D
Loomis, John.	Jeffersonville	H. 10
McCoy, William N	Jeffersonville	R. D
McKinney, Martin V.	Jeffersonville	R. D
McClure, David	Jeffersonville	R. 10
McClure, Sidney C	Jeffersonville	R. D
*McClure, Jesse D	Jeffersonville	R. D
McBride, Charles.	Jeffersonville	R. D
McCormack, Joseph C	Charlestown	R. D
Monroe, Geo. J.	Louisville, Ky	R. D
Poindexter, John M	Utica	R. D
Reynolds, James M	Memphis	R. D

*Deceased.

Clark County—Continued.

Name.	*Post Office.*	*School.*
Russell, James R	Nobbs	R. D
Ruddell, Isaac N	Jeffersonville	R. D
Sanderson, Thomas	Charlestown	R. D
Stalker, Benj. F	New Providence	R. D
Sheets, William H	Jeffersonville	R. D
Scull, Benj. F	Bethlehem	R. 10
Taggart, Samuel C	Charlestown	R. D
Veazey, T. Reid	Henryville	R. D
Watkins, E. N	Jeffersonville	R. D
Wisner, Wm. E.	Henryville	R. D
Work, Will F	Charlestown	E. D
Williams, Lewis L	Utica	R. D

Regular, 33; Eclectic, 3; Homeopathic, 2; not reported, 2.

Boone County.

Bunnell, M. H	Lebanon	R. D
Bonnell, T. A.	New Brunswick	R. 3
Burk, T. P	Jamestown	N. R. 10
Boyd, J. M	Thorntown	R. D
Buttery, Margarette	Lebanon	A. 10
Bennington, A. M	Lebanon	R. 10
Brown, E. L	Thorntown	E. D
Ball, Jos. P.	Lebanon	E. D
Brindle, B. F.	Kimberlin	P-M. D
Burke, George L	Jamestown	R. 10
Banta, Sam'l J.	Jamestown	R. 10
CURRYER, W. F	Thorntown	E. D
Cotton, H. T	Zionsville	R. D
Cain, John M.	Northfield	R. D
Clark, A. J	Elizaville	R. D
Coon, H. N	Lebanon	H. D
Crafton, O	Lebanon	R. 10
Davenport, J. W	Sheridan	R. D
Deacon, A. L		R. D
Davis, D. B	Thorntown	R. 10
Duzan, G. N	Zionsville	R. D
Dunnington, A.	Thorntown	R. 10
Everett, W. E	White Lick	R. D
Finch, A. M	Jamestown	N. R. 3
Fancier, Jnó. W	Sheridan	R. D
Garrison, J. L. F	Lebanon	R. 10
Hardy, J. S.	Whitestown	R. D
Heady, W. S	Jamestown	R. D
Harrison, T. H	Lebanon	R. D
Hamilton, J. A.	Advance	E. 10
Hawke, Jos. R	Thorntown	E. 10
Jones, R. E.	Lebanon	R. D
Jordan, T. W.	White Lick	R. D
Kellogg, N. P.	Lebanon	E. D
Leach, J. T	N. Brunswick	N. R. 10
Lane, T. H	Lebanon	R. D
Myers, John W.	Terhune	R. D
Miller, A. O	Lebanon	R. D
McGee, J. A	Zionsville	P.-M. D
Nickey, A. S	Elizaville	R. 10
O'Rear, J. H	Jamestown	R. 10
Porter, A. G	Lebanon	R. D
Porter, Jno R	Lebanon	R. 3
Purdy, J. C	Kimberlin	P.-M. 3
Rose, M. H	Thorntown	R. D
Reagan, Jesse	Rees Mills	R. 10
Roberts, Jos. D.	Whitestown	E. D
Smith, Jno. W	Lebanon	R. D
Smith, C. H.	Lebanon	R. D
Scull, D. C	Lebanon	R. 3
Steelsmith, J. M	Elizaville	R. D
Shulse, W. H	Lebanon	R. D
Turner, Thos. S.	Terhune	P.-M. D
Trowbridge, Reese	Lebanon	R. D
Utter, Jos. A	Thorntown	H. D
Umberhine, C. D	Rees Mills	R. D
Van Nuys, D. H	Lebanon	R. D
Van Arsdel, G. M	Jamestown	R. D
Ware, W. H	Cason	R. 10
Walker, D. R.	Rees Mills	R. D
White, A. T	Advance	N. R. 3
Whiteneck, Jno. H.	Zionsville	R. D
Waterous, H. W	Elizaville	R. D

Regular, 45; Eclectic, 7; Homeopathic, 2; Physio-Medical, 4: not reported, 4.

Clay County.

Allen, Hiram P.	Bowling Green	R. 3
Brouillette, S. L	Clay City	R. D
Bartholomew, N. B.	Poland	R. 3
Brown, W. B	Clay City	R. 10
Byres, L. S	Staunton	R. 3
Brock, L. G	Carbon	R. D
Berne, S. P	Clay City	R. D
Black, S. D	Brazil	R. D
Briley, A	Coffey	R. 10
Carney, J. W	Staunton	R. 10
Cushman, D. W.	Cloverland	R. D
Chamberlain, W. F.	Poland	R. D
Culbertson, R. H	Brazil	R. D
Dillman, M. S	Staunton	R. D
Elliott, T. A	Poland	R. D
Freed, M. A	Clay City	R. D
Finley, G. W	Harmony	R. 3
Green, T. A.	Ashboro	R. 10
Gertsmeyer, J	Staunton	R. 3
Griffith, L.	Saline	R. D
Gantz, R	Saline	R. 10
Gifford, J. C	Brazil	R. D
Glassgo, T. A	Brazil	R. 3
Hawkins, W. B	Brazil	R. 10
Hansell, D	Lena	R. 10
Hale, L. A	Martz	R. 10
Holmes, B. F	Asherville	R. D
James, O	Cory	R. D
Leachman, J. M	Bowling Green	R. 10
Modesilt, J A	Cory	R. D
Morton, W. C. P	Cardonia	R. 3
Morgan, B. B	Brazil	R. D
Moss, J. R	Center Point	R. D
McCullough, F. R	Staunton	R. D
McCollum, R	Bowling Green	R. D
Nalb, A. H	Hoosierville	R. 10
Phipps, J. J.	Clay City	R. 10
Pell, G. M	Carbon	R. D
Price, J. M	Brazil	R. 10
Rundel, A. E	Center Point	R. D
Smith, J. F	Brazil	R. 3
Spellbring, B. F	Knightsville	E. 3
Stone, W. R.	Poland	R. 10
Siddons, J. O	Harmony	R. 10
Swinehart, M. H	Asherville	R. 10
TULLEY, A. F	Brazil	R. D
Thornton, F. G	Knightsville	R. 3
Talbot, E. P	Bowling Green	R. D
Thomas, D. O.	Knightsville	R. D
Vansandt, W. H	Carbon	R. D
Williams, J.	Bowl'g G'n	P.-M. 10
Wolfe, C	Clay City	R. D
Zook, D.	Clay City	R. D

Regular, 51; Eclectic, 1; Physio-Medical, 1.

Clinton County.

Name.	*Post Office.*	*School.*	*Name.*	*Post Office.*	*School.*
Abston, J. M		R. D	Millburn, J. E	Colfax	R. 10
Adams, J. M. C.	Frankfort	R. D	Motter, T. L	Mulberry	R. 3
Brown, G. W	Frankfort	R. D	Morrison, O. A. J.	Middlefork	R. D
Bogaw, E. W	Kirklin	R. D	Martin, M. L	Forest	R. 10
Bowers, V	Michigantown.	R. D	Miller, E	Sedalia	R. 10
Coon, H. J	Colfax	R. D	McMurry, J. S	Frankfort	R. D
Canfield, M. S	Frankfort	E. D	McGuire, W. H	Frankfort	E. D
Cripe, D. E	Frankfort	E. 10	PALMER, R. F.	Frankfort	R. D
Cooper, W. E	Ricard's Mills.	R. D	Parker, Jos	Colfax	R. D
Chittick, A. J.	Hillisburg	R. D	Randall, W. H	Hillisburg	R. 10
Cox, T. B	Frankfort	R. D	Sims, S. B.	Frankfort	R. D
Douglas, I. W	Michigantown.	R. D	Schuinn, E. E	Kirklin	R. D
Douglas, S	Killmoresville	R. 10	Speitel, H. B	Frankfort	N. R. 10
Davis, N	Frankfort	H. D	Saylors, A. J	Rossville	R. D.
Earhart, I. S	Mulberry	R. D	Smith, W. G	Scircleville	R. 3
Fisher, S. B.	Rossville	E. 10	Seawright, J. P.	Moran	R. D
Fisher, J. J	Rossville	R. D	Strange, W	Frankfort	R. 10
Gard, O	Frankfort	R. D	Shaw, J. E	Rossville	R. D
Gentry, J. M	Frankfort	R. D	Seigler, J. N	Sedalia	R. 3
Horniday, W. H	Forest	R. D	Tharp, L	Boyleston	R. 3
Huntsinger, E	Frankfort	E. D	Vale, H. W	Colfax	R. D
Knapp, S. O	Frankfort	R. D	Wise, J. B	Frankfort	H. D
Koons, M. T	Mulberry	R. D	Youkey, ——		R. D
Loftin, John	Frankfort	R. D	Youkey, ——		R. D
Lovell, C. H	Frankfort	N. R. D	Yundt, A. W	Mulberry	R. D
Millburn, R. C	Colfax	R. 3	Young, M. V	Geetingsville	R. D

Regular, 43; Eclectic, 5; Homeopathic, 2; not reported, 2.

Crawford County.

Name.	*Post Office.*	*School.*	*Name.*	*Post Office.*	*School.*
Anderson, Jno. W	Milltown	R. D	Holland, Wm	Milltown	R. 10
Bird, Wm. C	English	R. 10	Hazlewood, John	Boston Station	R. D
Baylor, Geo. W.	Milltown	R. D	Hutcheson, R. H	Riceville	R. D
Bullington, Wm. H	West Fork	R. 10	Hollcroft, W. R	Alton	R. 10
Brown, Sylvester L	Boston Station	R. 10	Knight, John B	Mt. Prospect	R. 10
Byrn, Spencer	Marengo.	R. D	Kimes, Daniel	Leavenworth	R. 10
Bobbitt, John H	Boston Station	R. 10	King, Newton W	Taswell	R. 10
Cole, Wm. A	English	R. D	Luckett, Chas. D	Boston Station	R. D
Chambers, S. B. F	Marengo	H. D	Merriles, Wm. M.	Leavenworth	H. 10
Courtney, Thos.	Riceville	R. 3	Murphy, Lewis H	Alton	R. D
Daniels, Wm	Marengo	R. D	McCartney, Jos. C	West Fork	R. D
Gobbel, Frederick R	Grantsburg	R. 3	SETSER, H. H.	Leavenworth	R. D
Gibbs, John H	Milltown	R. D	Stewart, Lewis B	Marengo	H. 10
Hammond, John M	English	R. 3	Vandiver, Joel	Mt. Prospect	R. 10
Hammond, H. C	English	R. D	Walls, John W.	Boston Station	R. 3

Regular, 27; Homeopathic, 3.

Daviess County.

Name.	*Post Office.*	*School.*	*Name.*	*Post Office.*	*School.*
Achor, James M	Cornettsville	R. 10	Parks, James F.	Cumback	R. D
Bigham, Augustine A	Montgomery	R. D	Peck, Samuel W	Washington.	R. D
Burrill, Horace H	Washington	N. R. 10	Porter, A. W	Portersville	E. D
Burris, Levi	Alfordsville.	H. D	Robinson, George M	Cannelburgh	R. 3
Carter, David R	Epsom	R. 3	Ragsdale, Mark H	Glendale	R. 3
Clark, Jacob W.	Glendale	R. D	Ray, Thomas G.	Cannelburgh	R. 3
Clayton Quinten		E 10	Sabin, Almer L.	Washington.	E. D
Culmer, Stephen O	Odon	R. D	Staudley, Louis A	Cornettsville	R. 3
Culmer, George F	Odon	E. 3	Swartz, Caroden L	Washington.	H. D
Dagley, Elias L.	Washington.	R. 10	Sears, Barton	Owl Prairie	R. 10
Dearmin, John	Odon	R. 10	SCUDDER, CHAS. P.	Washington.	R. D
Fitzgibbon, John	Washington.	R. D	Strouse, Wm. H. H	Washington	H. 10
Gers, Henry	Washington.	R. D	Scanlon, Michael D	Washington.	R. D
Hobbs, Wm. P	Raglesville	E. 10	Sears, Thomas M	Owl Prairie	R. D
Harned, Francis M.	Washington.	R. D	Scudder, John A	Washington.	R. D
Jones, John N	Washington.	R. D	Scudder, Charles	Washington.	R. D
Kempf, Andrew	Washington	N. R. 10	Smith, Daniel J.	Odon	R. D
Killion, John W		R. 10	Tolliver, Milton P	Owl Prairie	R. 10
Lane, Allen K	Odon	R. 10	Taylor, Harvey	Raglesville	R. D
Moore, Jackson L	Washington.	R. D	Wolfe, Hamilton	Washington.	R. D
Millis, Edward D.	Plainville.	R. 10	Williford, Geo. W	Glendale	R. D
Mitchell, John S	Alfordsville.	R. D	Walls, Wm. B	Alfordsville.	R. 10
McKittrick, O. H	Plainville.	R. 10	Williford, Wm. C.	Montgomery	R. D
Oppelt, E. A	Cannelburgh	R. D			

Regular, 37; Eclectic, 5; Homeopathic, 3; not reported, 2.

Dearborn County.

Name.	*Post Office.*	*School.*
Barkley, J. M	Farmers' Retr't.	R. D
Bond, Edwin P	Lawrenceburg	R. 10
Bond, Marc. L	Aurora	R. D
Bond, R. C	Aurora	R. D
Bowers, A. J	Moore's Hill	R. D
Chamberlain, S. B	Moore's Hill	R. 10
Chase, H. G.	Guilford	R. D
Collins, S. H	Lawrenceburg	R. D
Craig, Thos. E	Lawrenceburg	R. 3
Craig, S. W	Lawrenceburg	R. D
Daughters, A. P	Moore's Hill	R. 10
Fermier, Pierre	Weisburg	R. 10
Freeland, J. L	Manchester	R. D
Gatch, Jas. D	Lawrenceburg	R. D
Hatfield, M		H. D
Haines, A. B	Aurora	R. D
Haywood, M. P	Lawrenceburg	H. D
Henry, W. C	Aurora	R. D
Heaton, Conley	Moore's Hill	R. D
Kyle, Thos. M	Manchester	R. D
Lamb, James	Aurora	R. D
Lazenby, J. R	Guilford	R. 3
Liddle, Jno. R	Bright	R. D
Lowden, L. A	Wilmington	R. D
Lord, Thos. J	Dillsborough	E. D
Miller, C. B.	Lawrenceburg	R. D
Ratcliff, J. T	New Alsace	R. 3
Rectanus, Fredrick	Aurora	R. D
Rosser, David	Moore's Hill	R. D
Sale, F. H	Dillsborough	R. D
Sale, J. H.	Dillsborough	R. D
Smith, Edwin	Aurora	H. D
Smith, Y. C.	Aurora	R. D
Sutton, George	Aurora	R. D
Sutton, H. H	Aurora	R. D
Swales, Wilson H	Logan	R. D
Swales, Wilson H., Jr.	Logan	R. D
Terrill, W. M	Lawrenceburg	R. D
Treon, Fredrick	Aurora	R. D
Thomas, M. L	Harrison, Ohio	E. D
Thomas, R. L	Harrison, Ohio	E. D
Vincint. H. C	Guilford	R. D
WALTER, CARL G	Lawrenceburg	R. 10
Weaver, S. M	Dillsborough	R. D
Willette, W. H	Harrison, Ohio	R. D

Regular, 40; Eclectic, 3; Homeopathic, 3.

Decatur County.

Armstrong, A	Adams	R. D
Armington, A. A.	Greensburg	R. 3
Alexander, J. H	Clifty	R. D
Bracken, J. B	Greenburg	R. 10
Bracken, Wm	Greensburg	R. 10
Bobbitt, J. H	Greensburg	R. D
Beal, C. M	Clarksburg	R. D
Ballard, D. J	St. Paul	R. D
Bunker, L. C	Greensburg	E. D
Burrows, J. P	Westport	R. 10
Biddinger, S. W	Wanesburg	E. 10
Clarck, Geo. E	Wanesburg	R. D
Crawford, Geo. S	Clifty	R. D
Cain, Cornelius	Clarksburg	R. 10
Charlton, N. E	Newburg	R. D
Clark, Thos. J.	Letts Corner	E. D
Covert. C. A	Greensburg	R. D
Dailey, F. M	Milhousen	R. 10
Depew. R. J	St. Paul	R. D
Eads, E. E		R. D
Falconburg, M. G	Greensburg	E. 10
Fitzpatrick, Bart.	Clifty	R. D
Godfrey, George W	Newburg	R. 3
Goff. Wesley		R. 10
Hitt, J. Y.	Greensburg	R. D
Howard, F. M	St. Paul	R. D
Howard, J. W	St. Paul	R. 3
Hitt, S. B	Greensburg	R. 3
Hause, Wm.	Westport	E. D
Heuser, Conrad		R. 10
Johnson, Thomas	Greensburg	R. D
Jerman, L. W. D	Ballsville	R. D
Kirkpatrick, J. B.		R. D
Leatherman, J. H	Greensburg	H. 3
Mobley, M. B.	Mechanicsburg	R. 10
Maguire, S. M	Greensburg	H. 10
McCoy, W. A.	Sardinia	R. D
Marlow, Austin	Greensburg	N. R. 10
Parker, J. W	Adams	N. R. 10
Pennington, Ely	New Point	R. 10
Ruby, G. P		H. D
Riley, Wm. F	Sardinia	R. D
Riley, J. H. S.	Sardinia	R. D
Reamy, A. S	Greensburg	R. D
Snedeker, F. H	New Point	R. 3
Smith, J. L.	Clarksburg	R. D
Selman, J. W.	Greensburg	R. D
Scobey, D. L	Greensburg	R. D
Schofield, J. V	Harris City	R. D
Swein, E. B.	Greensburg	R. 10
THOMAS, R. M	Sandusky	R. D
Vest, M. C	Newburg	R. 3
Wright, S. V	Greensburg	R. D
Wooden, J. L.	Greensburg	R. D
Wooden, W. H	Greensburg	R. D
White, S. B.	Letts Corner	R. D

Regular, 46; Eclectic, 5; Homeopathic, 3; not reported, 2.

Dekalb County.

Allen, W. S	Auburn	R. 10
Barnett, Jos. S	Butler	R. D
Bennett, Jos. B.	Butler	R. D
Bevier, William	Waterloo	E. D
Bolan, Milton J	Butler	R. 10
Brown, David N. E.	Hamilton	R. 10
Bronson, Vincent C	Newville	R. D
Cameron, Jas. G	Edon, Ohio	R. D
Cameron, John F.	Hamilton	R. D
Carpender, Wm. P	Butler	R. D
Casebeer, Jacob B	Auburn	R. D
Chamberlain, Jas. N	Waterloo	R. D
Cissel, B. G	Corunna	R. 10
Darby, A. B.	Waterloo	R. D
Dunn, Jacob T	Garrett	R. 3
Emanuel, Gerry E	Spencerville	R. D
Emanuel, Jonas	Spencerville	R. D
Fanning, Fred. W	Butler	R. D
Farrington, A. S	Waterloo	R. 10
Ford, Joseph H.	Auburn	R. 10
Greenewald, Marquis.	Auburn Junct'n	R. 10
Hamilton. Frank C.	Hudson	R. 3
Hathaway, Calvin	Kendallville	R. D
Houser, James A	Arcadia	N. R. D
Hull, Henry H	Newville	R. 10
Hull, Jacob	Spencerville	E. D
Kenestrie, Joseph D	Butler	R. D
Kester, Alonzo A.	Garrett	H. 3

Dekalb County—Continued.

Name.	*Post Office.*	*School.*
Lawrence, James M	Newville	R. 3
Lewis, James V.	Auburn	R. D
Matheney, Timot'y G.	Auburn	R. D
Mercer, William M.	Corunna	R. D
Miller, Jonathan	Butler.	R. 10
Morrison, Thos. Ray	Hudson	R. D
Mortland, David G	Edgerton, Ohio	R. D
Mortland, James C.	Edgerton, Ohio	R. D
Noble, Geo. W	Edon, Ohio	E. D
Nusbaum, William H.	Corunna.	R. D
Otis, William D	Hicksville, Ohio	R. D
Rausburg, Martin V		R. D
Rudolph, Oswald F.	Fairfield Center.	R. D
Sargent, Theodore C	Garrett	R. D
Sebing, D. A	Auburn	R. 10
Sheffer, Barton S	Blair	R. D
Shepherd, Z. W.	Waterloo	H. D
Snyder, Fairfield	Corunna.	R. D
Stough, Solomon	Waterloo	R. 10
Sturgis, Louis T	Garrett	R. D
SWARTS, DAVID J.	Auburn	R. D
Swarts, Vesta M. W	Auburn	R. D
Wonsetter, Gibeon	Hicksville, Ohio.	E. D

Regular, 44; Eclectic, 4; Homeopathic, 2; not reported, 1.

Delaware County.

Armitage, D. R.	Muncie	R. D
Ames, Geo. F	Eaton	R. D
BRADBURY, A.B.	Muncie	R. D
Boyden, W. J.	Muncie	R. D
Bowles, T. J	Muncie	R. D
Baird, J. V	Albany	E. 3
Bunch, R. A	Desoto.	E. D
Cotterell, D. V	Muncie	R. 10
Clemens, W. D	New Corner	R. 10
Cornelius, W. W	Daleville	E. 10
Comstock, J. S. D.	Cowan.	R. 10
Day, B. F.	Harrison.	R. D
Downing, J. R	Reed's Station	R. D
Eastus, W. T	Wheeling	R. D
Green, G. R.	Muncie	R. D
Good, A. H	Selma	R. 10
Hayden, J. H	Harrison	P.-M. D
Jump, S. V	New Burlington.	R. D
James, M	Muncie	R. D
Kemper, G. W. H	Muncie	R. D
LeFavour, J	Albany	R. 3
Martin, S.	Daleville	R. D
Martin, J. S.	Muncie	H. D
Mock, A. R	Muncie	N. R. D
Marshall, R.	Cowan.	R. D
McCrillis, Chas.	Muncie	R. 3
Mitchell, H.	Muncie	R. 10
Murray, A. P	Albany	R. D
Murray, A. L	Eaton	R. 10
Munsey, D. O	New Corner	R. D
Phinney, A. J	Muncie	H. D
Pucket, E. J	Muncie	R. D
Reasoner, O. I	Shidler	R. D
Ricks, M. W	Muncie	P.-M. D
Ross, J	Muncie	E. 3
Skiff, Clark.	Selma	R. 10
Snodgrass, B. D	Reeds	P.-M. D
Schaub, D	Muncie.	N. R. D
Snell, S. R	Muncie.	N. R. 10
Shively, D. M.	Yorktown	P.-M. 10
Slack, G. W.	Yorktown	R. D
Shields, E. A	Muncie	R. D
Spurgeon, W. A	Muncie	P.-M. D
Shidler, J. K	Muncie.	N. R. 10
Summers, H. C	Daleville	R. 10
Smith, C. W	Muncie	R. D
Trowbridge, D. M	Harrison.	E. 10
Tuttle, J	Wheeling	R. 3
Winans, H. M	Muncie	R. D
Youngs, B. F	Eaton	E. 10

Regular, 33; Eclectic, 6; Homeopathic, 2; Physio-Medical, 5; not reported, 4.

Dubois County.

Clifford, Jasper.	Holland	E. D
Coble, P. L	Knoxville	R. 3
Faulkner, Joseph F	Birdseye.	N. R. 10
Glezen, E. A	Ireland	N. R. 10
Gray, O. B	Schnellville.	N. R. 10
Gobble, Frederic	Birdseye.	R. D
Gengelbach, E. E.	Not known	E. D
Hunter, Walter M	Porterville	R. 3
Johnson, John R	Celestine	E. 3
Kemp, J. E	Jasper	R. D
Kemp, Paul H	Ferdinand.	R. D
Lukemeyer, E. G.	Huntingburg	R. D
Line, W. A	Hillham	N. R. 10
Montgomery, G. B	Huntingburg	R. D
McMahan, W. R	Huntingburg	R. D
McCown, C. C.	Ireland	R. D
Newland, Charles W	Hillham	R. D
Parr, G. L.	Ireland	R. D
Rust, John F	Holland	N. R. 10
Salb, John P	Jasper	R. D
Stork, H. W.	Holland	R. D
Scheliha, Paul W. V	Huntingburg	E. D
Schreifer, John.	St. Anthony.	R. 3
Stephenson, Edward	Jasper	N. R. 10
Schwartz, C. W	Huntingburg	R. D
Veneman, R. T	Ferdinaud.	R. D
Wertz, Toliver	Jasper	R. D
WELLS, W. H.	Jasper	R. D
Williams, J. A	Altoga.	N. R. D
Walderip, H. L	Ludlow	N. R. 10
Woelker, Charles	Huntingb'g	N. R. 10
Walker, George W	Ellsworth	N. R. 10
William, G. P.	Huntingb'g	N. R. 10

Regular, 18; Eclectic, 4; not reported, 11.

Elkhart County.

Name.	*Post Office.*	*School.*
Aldrich, Charles J	Middlebury	R. D
Aitkin, F. M	Bristol	R. D
Barbour, Julius E	Bristol	H. D
Bowser, J. M	Nappanee	R. D
Brumbaugh, Melvin	Gravelton	N. R. D
Bower, Charles C	Bristol	R. D
Coover, Wm. H	Goshen	E. 10
Crum, Peter W	Middlebury	R. 10
Crocket, James K	Elkhart	H. 10
Cassler, Elizabeth	Elkhart	R. D
Corns, Charles V	Benton	R. 3
Cammack, Thomas		R. D
Dreese, Chas. L	Goshen	R. D
Eisenbice, Samuel	New Paris	R. 10
Eckleman, F. C	Elkhart	R. D
Fisher, A. L	Elkhart	H. D
Funk, Sophia M	Elkhart	H. D
Frink, C. S	Elkhart	R. D
Grenier, Geo. G	Vistula	R. 10
Harrington, O. B	Elkhart	R. D
Hatch, O. W	Elkhart	R. 10
Hendrix, T. C	Elkhart	R. D
Haggerty, R. Q	Elkhart	R. D
Heatwale, Joseph H	Goshen	R. D
Harding, P. D	Goshen	R. D
Horton, John	Elkhart	— D
Hani, W. F	Middlebury	R. D
Heatwale, Henry	Goshen	— 10
Inks, John S	Wakarusa	R. D
Irwin, A. J	Goshen	R. D
Jennings, J. W	Millersburg	R. D
Johnson, William W	Goshen	R. D
Krider, William B	Goshen	H. D
Krider, Martin K	Goshen	H. D
Knepple, W. H	Wakarusa	E. 3
LATTA, M. M	Goshen	R. D
Latta, Will J	Goshen	R. D
Lambert, Curtis A	Goshen	R. D
Larimer, Bartlett	Millersburg	R. D
Myers, J. G. L	Goshen	R. D
Miles, Franklin	Elkhart	R. D
Mathews, James	New Paris	R. D
Montgomery, Thos	Elkhart	N. R. 10
Myers, Jacob	Middleburg	E. D
Miller, D. L	Goshen	R. D
Miller, Levi E	Gravelton	H. 10
Martin, Samuel E	Vistula	E. 10
Neal, William A	Elkhart	R. 10
Putt, F. L	Middlebury	R. D
Pixley, C. S	Elkhart	R. D
Stauffer, Horace O	Nappanee	R. D
Sweetland, Frank	Elkhart	R. D
Sparklin, C. C	Goshen	R. 10
Sensenich, Aaron S	Wakarusa	R. D
Stauffer, Walter O	Nappanee	R. D
Thomas, Warren H	Elkhart	H. D
Turner, Porter	Elkhart	N. R. 3
Whippy, Wm. A	Goshen	H. D
Wickham, Wm. W	Goshen	E. D
Whitmer, B. F	Goshen	R. D
Work, James	Elkhart	R. D

Regular, 42; Eclectic, 5; Homeopathic, 8; not reported, 5.

Fayette County.

Butler, D. W	Connersville	R. 10
Chitwood, Geo. R	Connersville	R. 10
Chitwood, Joshua	Connersville	R. D
Chitwood, John E	Connersville	R. D
Chitwood, Frank	Connersville	R. 10
Derbyshire, Eph	Bentonville	R. D
DILLMAN, L. D	Connersville	R. D
Ellis, E. W	Falmouth	P.-M. D
Gregg, V. H	Connersville	R. 10
Hamilton, S. N	Connersville	R. D
Larimore, J. D	Connersville	R. D
McMahon, W. H	Connersville	H. D
Morgan, P. P	Connersville	H. D
Pepper, W. J	Connersville	R. D
Phares, O. P	Connersville	R. D
Shepard, L. D	Everton	R. 10
Sipe, R. W	Orange	R. D
Smith, Jas. A	Brownsville	R. 10
Smolley, J. G	Connersville	N. R D
Tingley, U. B	Harrisburg	R. 10
Turner, John	Null's Mills	E. 10
Vance, S. W	Connersville	R. D
Wall, John	Connersville	R. 10
Webster, Elias	Connersville	H. D
Wyman, Chas. P	Everton	R. D
Wyman, Chas	Lyons Station	R. D

Regular, 20; Eclectic, 1; Homeopathic, 3; Physio-Medical, 1; not reported, 1.

Floyd County.

Alexander, S. J	New Albany	R. D
Brigham, R. S	New Albany	H. D
Bowman, Chas	New Albany	R. D
Burney, Wm. A	New Albany	R. D
Beurst, Max	New Albany	R. D
Beust, Bernard	New Albany	R. 10
Brockington, C. M	New Albany	H. D
Cannon, Geo. H	New Albany	R. D
Cole, John A	Georgetown	R. D
Clapp, Wm. A	New Albany	R. D
COOK, CHAS. P	New Albany	R. D
Davis, Chas. P	Galena	R. D
Davis, J. M	Greenville	R. D
Easley, E. P	New Albany	R. D
Erni, O. G	New Albany	H. D
Knoefel, R. C	New Albany	R. D
Kay, Robert	Greenville	R. D
Lung, H. B	New Albany	R. D
Lemon, John H	New Albany	R. 10
Levi, L. D	Georgetown	R. D
McIntyre, C. W	New Albany	R. D
Needham, H. J	New Albany	H. D
Neat, T. C	New Albany	R. 10
Neat, Andrew	New Albany	R. D
Rutherford, R. S	Galena	R. D
Stewart, John L	New Albany	R. D
Sloan, John	New Albany	R. D
Starr, W. L	New Albany	R. D
Scribner, E. B	New Albany	R. D
Tucker, W. W	Georgetown	R. 10
Wilcox, S. C	New Albany	R. D
Williams, Wm	Greenville	R. D

Regular, 28; Homeopathic, 4.

Fountain County.

Name.	*Post Office.*	*School.*
Armstrong, Lewis P	Newtown	R. D
Burlington, Jas. C	Attica	E. D
Birch, Edward L	Covington	R. D
Cole, Wm. C	Attica	R. D
Case, Marvin T.	Attica	R. D
Coggins, Chas. M	Snoddy's Mills	R. D
Cooper, Silas C	Fountain P O.	N. R. 10
Davidson, Jesse F	Wallace P. O	R. D
Dowden, Jas. W	Yeddo	N. R. 10
Fine, Ephraim M	Stone Bluff	R. D
Finney, Chas. J.	Attica	R. D
Gooden, Goldsmith	Veedersburg.	R. D
Hays, Geo. C	Hillsboro	R. D
JONES, GEO. S	Covington	R. D
Johnson, Chas. S	Harveysburg	R. 10
Lyons, Lewis D.	Attica	R. 10
Livengood, Jasper A	Wallace P. O	R. D
Mock, John W	Covington	R. D
Moore, Patrick B.	Harveysburg	R. 10
McNeil, Scott.	Stone Bluff	R. 3
McClelland, A. J	Veedersburg	N. R. 10
Petit, Marshall	Veedersburg.	R. D
Quinn, Jas. W	Fountain P. O	R. 10
Riffle, John S	Newtown	R. D
Rowland, Geo	Covington	R. D
Richardson, A. G.	Veedersburg.	R. D
Rupert, Archie M	Attica	R. D
Rice, John T	Attica	R. D
Spining, John N	Covington	R. 10
Stout, Wm. R.	Hillsboro	R. D
Shoaf, F. A	Yeddo	R. D
Shotts, Henry R	Wallace	R. D
Sparks, J. T	Yeddo	N. R. 10
Wilson, Wm. L.	Attica	R. D
Washburn, A. A	Attica	R. D
Young, F. B	Veedersburg.	R. D

Regular, 31; Eclectic, 1; not reported, 4.

Franklin County.

Averdick, H. G	Oldenburg	R. D
Anness W. R	Bath P. O	E. 3
Berry, George.	Brookville	R. 10
Berry, W. H	Brookville	R. D
BUCKINGHAM, G. B	Brookville	R. D
Bertenshaw, T. F	Drewersburg	R. 3
Cupp, M. F	Metamora	R. D
Conner, I. H	Metamora	R. 10
Davis, W. H	Mt. Carmel	R. 10
Davis, I. R		R. D
Ford, Thomas.	Laurel.	R. D
Grahn, E. G	New Trenton	R. D
Gifford, S. A	Laurel.	R. D
Gregory, Henry.	Laurel.	R. 10
Hendricks, I. L.	Fairfield	R. 3
Jenkins, E. W	Mt. Carmel	R. D
Jerman, W. D		R. D
Lenegor, D. B	Whitcomb.	E. 3
McCarty, T. I.	Brookville	R. D
Monn, E. B	Oldenburg	R. D
Maddox, D. S.	Fairfield	R. D
Morgan, I. O	Springfield	R. D
Maguire, W. W	Metamora.	R. 10
Owens, R. I.	Cedar Grove	R. D
Patterson, E. L		R. D
Quick, I. H	Brookville	R. 10
Squires, G. E	Brookville	E. D
Seals, Frank	Whitcomb.	E. D
Shunn, Charles	St. Peters	R. 10
Simmons, E.	Fairfield	E. 3
Spillman, F. I		R. D
Stoddard, S. P	Brookville	E. D

Regular, 26: Eclectic, 6.

Fulton County.

Bailey, Allen S	Akron	R. 10
Brown, Angus	Rochester	H. 3
Calvin, G. M	Kewanna	E. D
Caple, Alfred B.	Grant	R. D
Campbell, C. W.	Marshtown	R. 3
Clymer, N. J	Bloomingsburg	E. D
Case, Augustus	Hoover's Sta	R. D
Doke, J. T	Tiosa	R. 3
Elkenburg, A. A	Tiosa	R. D
Fish, S. R.	Bloomingsburg	E. 10
Gould, Vernon	Rochester	R. D
Gould, Charles	Rochester	R. D
Hector, F. M	Rochester	E. D
Hector, Cornelius.	Rochester	E. D
Hill, Wm	Rochester	E. D
Harter, C. F.	Akron	R. D
Howell, J. Q	Kewanna	R. 10
Johnston, Aaron	Akron	R. 10
Loring, C. J.	Rochester	R. D
Morris, James M	Fulton.	R. 10
Mann, Jesse E	Akron	R. D
Overmeyer, B. F	Seiler's Ford	R. D
Peters, John B	Fulton.	R. 10
Peffler, W. F	Hoover's Sta	R. 3
Robbins, A. H	Rochester	R. D
Rhodes, E. E	Bigfoot	R. 3
Shafer, W. S	Rochester	E. 3
SHIELDS, A. M	Rochester	R. D
Spohn, J. C	Rochester	R. D
Thompson, A. R	Kewanna	R. 10
Wait, O. P	Rochester	R. D

Regular, 23; Eclectic, 7; Homeopathic, 1.

Gibson County.

Name.	*Post Office.*	*School.*
Burton, A. R	Princeton	R. D
Burton, Hiram	Somerville	R. 10
Ballard, S. H	Haubstadt	R. D
Blair, W. W	Princeton	R. D
Blair, Franklin	Princeton	R. D
Bliss, Geo. I	Princeton	N. R. 10
Baldwin, I		N. R. D
Bosinger, F. W		R. D
Brown, Thos. M	Oaklond City	R. 10
Curtner, P. H.	Hazleton	R. D
Duncan, W. B	Patoka	N. R. 3
Eston, Jno. M	Ft. Branch	E. 3
French W. W	Ft. Branch	R. D
Fisher, Geo. C	Patoka	R. D
Gudgel, Jno. F	Hazleton	R. D
Hudson, O. L	Princeton	H. 10
Hopkins, Jos. N	Ft. Branch	R. D
Hunt, W. A		N. R. 10
Ireland, Jno. M	Francisco	R. D
Kidd, W. G	Princeton	R. D
KENDLE, G. C	Princeton	R. D
Lester, W. L	Oakland City	E. D
Lehman, Jno. L	Patoka	E. 3
Littlepage, Geo.	Warrenton	R. D
Mason, Geo. C	Oakland City	R. D
Maxam, F. H	Princeton	R. D
Marchant, Victor	Haubstadt.	R. D
Munford, S. E	Princeton	R. D
Montgomery, T. J	Owensville	R. D
Malone, Jno. A	Princeton	R. 10
Moore, Robert	Somerville	R. D
McGowan, J. W	Oakland City	R. D
McGowan, W. I	Oakland City	R. 10
Nelson, Frank	Hazleton	R. 10
Ottman, Peter	Haubstadt.	R. D
Patten, J. C	Francisco	R. D
Powell, D. G	Princeton	R. D
Runcie, J. W	Ft. Branch	R. D
Runcie, Geo. W	Ft. Branch	R. D
Reavis, D. P	Francisco	R. 3
Richie, L. B		N. R. 10
Strickland, Geo	Francisco	R. D
Stott, Jno	Princeton	R. D
Shoemaker, D. M.	Owensville	E. D
Shelton, J. W.	Somerville	R. 10
Shoptaugh, S. H	Princeton	R. D
Stewart, W. H	Oakland City	R. 10
Thomas, Geo. A	Haubstadt.	R. D
Williams, Jno. M	Owensville	E. D
Wilde, Chas. A		N. R. 10
West, V. T	Princeton	R. 10
Williamson, W. T	Ft. Branch	E. D
Woodruff, A. C	Somerville	R. D
Vellmer, Joseph		R. D

Regular, 41; Eclectic, 6; Homeopathic, 1; not reported, 6.

Grant County.

Adkins, J. C	Marion	R. 3
Ardery, Oscar	New Cumberl'd.	R. D
Barnes, W. C	Mier.	R. D
Barnes, Robert A.	Marion	P.-M D
Barnes, Eleanor	Marion	P.-M. D
Conwell, L. V.	Van Buren	R. D
Conover, Jas. A.	Jalapa.	E. D
Coldron, Wm. R	Marion	P.-M. D
Corey, Lavanner	Van Buren	R. D
Corey, Lewis	Van Buren	R. D
Daniels, G. W	Marion	R. D
Fallis, Amos L	Fairmont	P.-M. D
Flynn, W	Marion	R. D
Forrest, John H	Marion	E. D
Haines, N. P	Roseburg	R. D
Hamilton, A. A.	Marion	R. D
Hanmore, John.	Landess.	R. D
Henley, Alpheus	Fairmont	R. D
Hess, Luther	Marion	R. D
Hollis, Samuel	Upland	R. D
Hubbard, Wm. H.	Fairmont	R. D
Home, Samuel S	Jonesboro.	R. D
Hough, Wm. A.	Marion	P.-M. D
Jones, Chas. R	Jonesboro.	E. D
Jones, Enoch P.	Marion	E. D
Kimball, Thomas C	Marion	R. D
Knight, John C.	Jonesboro.	R. D
Lawshe, Isaac T	Swayzie	R. D
Lennox, Frank	Swayzie	R. 10
Langston, Edgar	Pt. Isabel	R. 10
Landess, Geo. A	Van Buren	R. D
Lomax, Wm	Marion	R. D
Lord, J. L	Pt. Isabel	R. D
Lytle, John B.	Marion	R. D
Meek, John A	Jonesboro.	R. 10
McKinney, Geo. W	Jonesboro.	R. D
Mock, Albert D.	Marion	P.-M. D
Moore, Charles V.	Fairmont	R. D
Morris, George P	Jadden	R. 3
Moon, Allen	Fairmont	P.-M. 3
Munsey, J. S		R. D
Nuzum, D. B	Rigdon	E. D
Puckett, Thomas J.		N. R. 10
Seal, Isaac N	Hackleman	R. D
Shiveley, James S	Marion	R. D
Shiveley, Marshall	Marion	R. D
Snodgrass, D. B.	Marion	P.-M. D
Stephens, A. B	Marion	P.-M. D
Stout, O. L	Upland	R. D
Small, Noah W.	Jonesboro.	E. D
Wall, M. M	Marion	H. D
Wright, Peter H	Fairmont	E. D
Wood, James B.		R. D
Wharton, Wm. L	New Cumberl'd.	R. D
Williamson, Peter E.	Sweetsers	R. D
Whitson, Eli M.	Jonesboro	E. D
Weddington, S. C.	Jonesboro.	R. 10
Williams, Lewis	Marion	R. D

Regular, 39; Eclectic, 8; Homoeopathic, 1; Physio-Medical, 9; not reported, 2.

Greene County.

Acton, A. G.	Elvan	E. 10
Arnold, J. G	Lyons	R. D
Asbery, W. H.	Jasonville.	R. D
Aydellotte, Thos	Worthington	R. D
Burge, M. C.	Park.	R. 10
Burke, W. H	Scotland.	R. D
Bridewell, L	Owensburg	R. 10
Cook, P. M	Solsberry	R. D
Clary, H. T	Worthington	R. D
Cravens, S. C	Bloomfield.	R. D
Connell, S. A	Rockford	R. 10
Dilley, L. H	Linton.	E. 3
Durment, C. R	Newberry	R. D
Edwards, C. H		R. D
Flemings, W. A		R. 10
GRAY, SIMEON.	Worthington	R. D

Greene County—Continued.

Name.	*Post Office.*	*School.*
Gray, John W	Bloomfield	R. D
Gray, Geo. B		R. D
Gray, O. F		R. D
Gilbert, W. H.		R. 10
Hilborn, E. W	Newberry	R. D
Harrah, John M	Switz City	R. D
Hannan, John W.	Scotland.	R. D
Herald, Henry	Owensburg	R. 10
Hanna, Jesse	Linton.	R. 10
Jackson, E. J.	Linton.	R. 3
Kutch, John	Solsberry	R. D
Lowder, H. R	Bloomfield	R. D
Lamerox, S. T		N. R. 10
Livingston, J. J		R. D
Mullenix, L. P	Worthington	R. D
McIntosh, J. P	Newark	E. 3
Marshall, A. F		R. 3
Mullano, Joseph	Lyons	R. D
Mayfield, T. B		R. D
Messick, A. J.		N. R. 10
McDowell, James	Hobbieville	R 10
McDowell, W. H		N. R. 10
Newman, W. R		N. R. 10
Purdy, John		R. D
Rankin, T. B	Bloomfield	R. D
Rose, B. A	Linton.	R. D
Reeves, Abraham	Worthington	R. D
Roberts, E. S	Worthington	R. 10
Roberts, E. J	Worthington	R. 10
Sherwood, E. T	Linton.	R. D
Sims, J. A.	Newberry	R. D
Seffridge, W. R	Worthington	R. D
Spaulding, Geo. L		R. 3
Stone, J. A. M	Switz City	R. D
Talbott, James E	Marco	R. D
Wilson, W. L.	Switz City.	R. D
Williams, N. W	Owensburg	R. D
Whiller, Thomas		R. D

Regular, 47; Eclectic, 3; not reported, 4.

Hamilton County.

Austin, E. P	Noblesville	E. 10
Applegate, A. J.	Eagletown.	R. D
BOOTH, A. D.	Noblesville	R. D
Benson, J. L	Noblesville	R. D
Byres, J. S	Noblesville	P.-M. D
Baker, J. J	Westfield.	P.-M. D
Cook, C. W	Carmel.	P.-M. D
Carey, Daniel.	Carmel.	P.-M. D
Conner, W. H.	New Britton.	R. 10
Coffin, B. F	Westfield.	P.-M. 10
Canada, J. L	Clarksville	R. 10
Carney, F. W.	Sheridan	R. D
Davenport, J. W	Sheridan	R. D
Davenport, H. E	Sheridan	R. D
Dove, S. C	Westfield	R. D
Driver, J. C.	Sheilville	R. D
Dunn, Joseph R	Boxley.	R. 10
Eskew, H T	Eagletown.	R. D
Fancher, F. W	Sheridan	R. D
Graham, W. B	Noblesville	R. D
Griffin, R. I	Deming	R. 3
Glass, T. F	Sheilville	R. 3
Gray, J. M	Noblesville	R. D
Houser, J. A	Arcadia	R. D
Haworth, M. C	Noblesville	R. D
Hobson, Joyce F	Noblesville	E. D
Herr, H. S	Westfield.	R. D
Harrold, N. G	Carmel.	R. D
Heath, J. P.	Fishers	R. D
Hershey, K. C	Carmel.	R. D
Hougham, John S	Perkinsville	N. R. D
Kitchel, J. S	Noblesville	H. 10
Loehr, E. C	Noblesville	R. D
Loder, C. C	Horton	H. D
Murphy, J. M	Arcadia	R. D
Miesse, A	Noblesville	R. D
Martin, J. H. L.	Arcadia	R. D
Millikan, H. W.	Sheridan.	P.-M. D
McMurtry, T. J.	Boxley.	R. D
McShane, T. J	Carmel.	R. D
McFatridge, L. C.	Sheilville	R. D
Moore, Geo. B	Omega.	R. 10
Newby, John C	Boxley.	R. D
Pettijohn, J. B	Westfield	R. D
Pettijohn, O. B	Deming	R. D
Parr, J. N	Jolietville.	R. D
Rhodes, Anna	Sheilville	R. 10
Smith, H. B	Olio	R. D
Sample, Minerva M	Noblesville	E. D
Smith, T. J	Strantown.	R. D
Sanders, I. M.	Cicero	R. 10
Startzman, Arcadia	Arcadia	R. 10
Stout, H. H	Cicero	R. D
Tucker, A. R	Cicero	R. D
White, T. A.	Noblesville	R. D
Whitesel, P. P	Clarksville	R. 10
Wonna, A. J	Sheilville	R. D
Warford, F. M	Cicero	R. D

Regular, 46; Eclectic, 3: Homeopathic, 2; Physio-Medical, 6; not reported, 1.

Hancock County.

Adams, Marcellus M	Greenfield.	R. D
BOOTS, SAMUEL S	Greenfield.	E. D
Buchell, Jacob	Sugar Creek	N. R. 10
Biebinger, John	Cleveland.	R. D
Coffin, Orlando S	Greenfield.	E. D
Carter, Lon A	Charlottsville.	R. D
Cox, William B	Charlottsville.	N. R. 3
Edwards, Orlando M	Greenfield.	R. 3
Ellis, Ira W	Mt. Comfort	R. D
Ely, James M	Sugar Creek.	R. D
Ely, Lucian C	Sugar Creek.	R D
Howard, Noble P., Sr.	Greenfield.	R. D
Howard, Noble P., Jr.	Greenfield.	R. D
Hammer, Nathan L	Wil'w B'nch.	P.-M. D
Hanna, Robert D.	Warrington	R. D
Hervey, Thos. P	McCordsville	R. 10
Judkins, Elam I	Greenfield.	R. D
Julian, James P	Wilkerson.	P.-M. D
Justice, John M	Eden	R. D
Justice, William A.	Eden	R. D
King, Warren R. K	Philadelphia	R. 3
Kirkhoff, Christ'n M	Sugar Creek.	R. D
Larimore, James M	Carrolton	N. R. D
Louden, John	Carrolton	E. D
Martin, Samuel M	Greenfield.	R. D
Ryan, William B.	Willow Branch	R. 3
Stuart Almon A	Fortville	R. 3
Stuart, John G	Fortville	R. D
Saunders, Theo. K	Fortville	N. R. 10
Troy, Samuel A	Milner's Corner.	R. D
True, Benj. F.	Sugar Creek.	R. 10
Trees, William.	Warrington	R. 10

Regular, 23; Eclectic, 3; Physio-Medical, 2; not reported, 4.

Harrison County.

Name.	*Post Office.*	*School.*	*Name.*	*Post Office.*	*School.*
Bennett, Jas. H	New Amsterdam	R. D	Kandie, W. A	Laconia	R. 10
Curry, John C	Mauckport	R. 10	LAWSON, JNO. E	Corydon	R. D
Clark, Jacob	Corydon	R. D	LaFollete, W. P	New Salisbury	R. D
Davis, W. H	New Middlet'n	R. D	Moore, William	Rosewood	R. D
Deubo, W. R	Crisp's Cr's R'ds	R. 10	Mitchem, Lyttleton	Crisp's Cr's R'ds	R. 10
Deen, H. K	Mauckport	R. D	Neeley, Isaac L	Idlewild	R. D
DeBrueler, O. E	Valley City	R. D	Render, William	New Amsterdam	R. D
Ellis, Joseph	Bradford	R. 10	Render, W. H.	Corydon.	R. D
Forbis, Burrel F	Laconia	R. D	Smith, Alma E. L	Corydon.	R. D
Funkhouser, W. H	Corydon	R. D	Smith, Samuel A	Laconia	R. D
Funk, L. T	Elizabeth	R. D.	Seigler, Richard R	Ramsey	R. D
Finley, Jno. F	Palmyra	R. 10	Winders, Lyman C.	New Middletown	R. 10
Fouts, Noah	New Salisbury	R. D	Wolfe, H. S	Corydon	R. D
Fouts, David C	Ramsey	R. 10	Wolfe, S. C	Elizabeth	R D
Hopper, Isaac J	DePauw	P.-M. D	Wolfe, L. O. P	Mauckport	R. D
Horner, Jacob S	Lanesville.	R. 10	Wolfe, Z. C	Lanesville	R. D
Jones, A. M	Corydon.	R. D	Zenor, J. W	New Middletown	R. 10

Regular, 33; Physio-Medical, 1.

Hendricks County.

Austin, Fred. H.	North Salem	E. D	Hamlin, Samuel E	Cartersburg	R. D
Adams, Thomas J	North Salem	R. D	Johnson, T. W	Danville	H. D
Bartholomew. B	Danville	R. D	Johnson, Oscar B.	Lizton.	R. D
Barker, Joel T	Brownsburg.	R. D	Kennedy, L. H	Danville	R. D
Brill, J. H	Pittsboro	R, D	Lawson, Wilson T	Danville	R. D
Broadhurst, John	North Salem	E. 10	Lewis, Robert	Plainfield	R. D
Brent, Newton	Pittsboro	R. D	Marsh, John L	Brownsburg.	E. D
Brazier, Thomas T	New Winchester.	R. 3	Masters, N. G.	Stilesville	R. D
Brooks, M. W.	Hazle Wood.	R. 3	Moore, R. C.	Belleville	R. D
Carter, Amos	Plainfield	R. D	Morgan, Abraham	Cartersburg	E. D
Dryden, Thomas F	Clayton	R. D	Osborn, John A.	Stilesville	R. D
Davidson, Albert M	Brownsburg.	R. D	O'Dwyer, M. A. M	Brownsburg.	E. D
Evans, Thomas.	Plainfield	R. D	Parker, M. G	Danville	R. D
Farabee, C. E.	Danville.	R. D	Procter, James M.	North Salem	R. D
French, John S.	Pittsboro	R. D	Robbins, Wm.	New Winchester	R. D
Green, J. N.	Stilesville.	R. D	Ragan, J. S.	Avon	R. D
Grimes, Wm. T.	Stilesville.	R. 3	Reagan, Jesse	Plainfield	R. 3
Graham, Thomas A	Brownsburg.	R. D	Summers, H. C	Amo.	R. D
Gilbert, A. K	Clayton	R. D	Strong, J. T.	Plainfield	R. D
Gulliter, Thomas B.	Plainfield	H. D	Snowden, Jesse.	Maple Wood	R. D
Hunt, Tilghman	Coatsville.	R. D	Strong, Asa M	Belleville	R. D
Hunt, Stephen	Coatsville.	R. D	Smith, Frederick W	Plainfield	R. D
Huron, F. H	Danville	H. D	Todd, Henry G	Danville	R. D
Heady, James M	North Salem	R. D	Towles, Alfred N.	Danville	R. D
House, G. H. F	Pittsboro	R. D	WHITE, CHALES A.	Danville	R. D
Hoadley, Wm. J	Danville	R. D	White, Wm. H	Amo.	R. D
Heavenridge, A	Stilesville.	R. D			

Regular, 45; Eclectic, 5; Homeopathic, 3.

Henry County.

Anderson, John T	Honey Creek	R. 3	Fuller William.	Knightstown	R. 10
BURKE, GEO. W	New Castle	R. D	Green, A. W	Knightstown	R. D
Boor, Walter A.	New Castle	R. D	Gronendyke. Y. W	New Castle	R. 3
Boor, William F	New Castle	R. D	Gronendpke, O. J	New Castle	R. D
Barrett, Omar H	Greensboro	R. D	Garrett, O. H	Cadiz	R. D
Bartlett, Claude G	Dunreith	R. D	Griffis, Robert	Middletown.	R. D
Bond, Caleb W	Cadiz	R. 10	Guyer, Oscar K	Lewisville.	R. D
Baily, Geo. D.	Spiceland	R. D	Hess, Frank C	Cadiz	R. D
Bartlett, A. C.	Lewisville.	R. D	Hobbs, Wilson	Knightstown	R. D
Bartlett, W. M	Lewisville	R. 10	Hobbs, O. W	Ogden.	R. D
Baily, Rachael	Spiceland	R. D	Holloway, O. E	Knightstown	R. D
Benedict. Hanford	Springport	R. 3	Hastings, Seth G	Spiceland.	H. D
Crouse, Henry M	Knightstown	R. D	Homer, Rich H.	Knightstown.	P.-M. D
Clapper, David.	Moorland	H. D	Holinger, F. N	Blountsville.	R. 3
Cochran, James	Spiceland	R. D	Hardesty. J. C	Millville	R. D
Dewey, Rebecca J	Knightstown	H. 10	Kissel. William	New Castle	R. 10
Eskew, William C	Kennard	R. 3	Kiskadden, H. S	Knightstown.	N. R. D
Estabrook, L. W	Springport	R. D	Jones. Henry W	Spiceland	R. D
Ferris, Edgar S.	New Castle	R. D	Jackson, Frank G	Mt. Summit.	R. 3
Ferris, Samuel	New Castle	R. 10	James, John H	Middletown	P.-M. D

Henry County—Continued.

Name.	*Post Office.*	*School.*	*Name.*	*Post Office.*	*School.*
Mendenhall, Elihu T	New Castle	R. D	Rogers, Samuel G	Lewisville.	E. D
Mendenhall, Isaac	New Castle	R. 10	Rutledge, E. D.	Sulphur Springs.	E. 3
Moore, John W	Mech'nicsb'g	P.-M. D	Rodcap, Geo. W	Middletown.	H. 3
McGaveran, W. B	Knightstown	R. D	Smith, Nelson, G.	Lewisville.	E. D
McCray, Robt. S	Kennard	R. D	Stafford, J. A	Millville.	P.-M. D
McKillop, Jas. H.	Knightstown	R. 10	Stafford, Daniel	New Castle	P.-M. D
Needham, John	New Castle	P.-M. D	Smith, Robt. H.	Greensboro	P.-M. D
Norvil, R. D	Mt. Summit	E. 10	Smith, Mary J	Greensboro	P.-M. 10
Newby, Zimri	Greensboro	R. 10	Stone, Frank L.	Middletown	P.-M. D
Olden, Wilson C	Grant City.	R. 10	Thornburgh, Frank L	Middletown.	R. D
Pendleton, C. B	Mech'nics'bg	P.-M. D	Thompson, J. F	New Castle	H. D
Pickering, Samuel	New Lisbon	R. D	Westerfield, J. M.	Knightstown	E. D
Rea John.	New Castle	R. D	Weaver, John	Knightstown	R. 10
Rea, Chas. L	Rogersville	R. D	Wayman, John C.	New Castle	P.-M. D
Reasoner. W. M	Sulphur Springs.	R. D	Weeks, Joseph	Mech'nicsb'g	P.-M. D
Rawlins, F. J. C	Elizabeth City	R. D	Weekly, D. M	Straughan.	R. D
Rawlins, John W.	Elizabeth City	R. 3	Welch, J. H	Middletown.	R. D
Ross, Jont.	Blountsville.	R. 10	Waters, S. C	Middletown.	R. D

Regular, 53; Eclectic, 5; Homeopathic, 5; Physio-Medical, 12; not reported, 1.

Huntington County.

Bucher, J. C	Andrews.	R. D	Long, Madison S	Huntington	E. D
Boswell, Andrew J	Andrews.	R. D	Lyons, Ira E	Huntington	R. D
Brandon, W. S	Plum Tree.	R. D	Lyons, Wm. B	Huntington	R. D
Brelsford, James W	River	R. D	Line, B. A	Andrews	P.-M. D
Crandall, Thos	Majenica.	E. D	Mitchell, S. P.	Mt. Etna.	R. D
Carson, W. F	Roanoke.	R. D	Mock, J, F	Huntington	N. R. 10
Chenoweth, G. P	Mt. Etna.	R. D	Palmer, Elbridge M	Warren	R. D
Chafee, W. C	Huntington	R. D	SEVERANCE LAGR.	Huntington	R. D
Carey, Levanner		R. D	Smith, Issac A	Majenica.	R. D
Chaffee, Alfred B	Roanoke.	R. D	Scott, Noble W.	Mt. Etna.	R. D
Eversole, Charles.	Pleasant Plain	R. D	Scott, Joseph	Markle	R. 10
Grayston, F. S. C	Huntington	R. D	Sproul, John S	Warren	R. D
Grayston, B. H. B	Huntington	R. D	Shaffer, Abner H	Huntington	R. D
Gemmell, Henry C	Markle	R. D	Trembley, Geo. D.	Bifpus	R. D
Grayston, Charles E	Huntington	R. D	Williams, O. B	Andrews.	R. 10
Good, Charles A	Warren	R. D	Williams. W. H.	Harlansburg	R. 10
Hupp, Samuel	Warren	R. D	Wright, Ervin	Roanoke.	R. D
Hall, E. V. U	Huntington	H. D	Wallace, L. S	Hoboken.	R. D
Kilander, Wm. J	Markle	R. 10	Young, E. T	Pleasant Plain.	N. R. 10
Leyman, Emery H	Huntington	R. D	Yingling, Daniel	Huntington	E. D
Leyman, D. S.	Huntington	R. D			

Regular, 34; Eclectic, 3; Homeopathic, 1; Physio-Medical, 1; not reported, 2.

Howard County.

Armstrong, E. A	Kokomo	R. D	Miller, L. C.	Alto	R. D
Bagwell, L. A	Jerome	R. D	Moore, John B	Kokomo.	R. D
Barnett, D. C		N. R. 10	Moulder, T. M	Russiaville	R. D
Bates, A. J	Kokomo.	R. D	Moulder, J. Mc. L	Kokomo.	R. D
Berst, J. H	Kokomo.	R. D	Murray, S. T	Greentown	R. 10
Biesecker, J. W	West Middleton.	E. D	Newlin, S.	New London	E. D
Conner, Levi	Jerome	R. 3	Oiler, L. H	Russiaville	R. 10
Cooper, Wm	Kokomo.	E. D	Payne, A. T.	Russiaville	R. D
Covalt, A. A	Greentown	R. D	Payton, W. B	Greentown	R. D
Freeman, A. C	Kokomo.	R. 10	Puckett, J. L	Kokomo.	R. D
Garr, J. O.	Kokomo.	R. D	Rice, E. C.	Oakford	E. D
Gifford, T. V	Kokomo.	N. R. 10	Ross, J. H.	Kokomo.	R. D
Haines, H. C	Sycamore	P.-M. D	Sawyer, E. W	Kokomo.	H. D
Hulburt, David	Kokomo.	N. R. D	Scott, Gideon.	Greentown	R. D
Hull, W. H	Center.	R. D	Scott, William	Kokomo.	R. D
Iles, S. B	Russiaville	R. 10	Shirley. D. J	New London	R. 10
Johnson, I. C	Kokomo.	R. D	Smith. R. H.	Kokomo.	R. D
Kern, Lewis	Kokomo.	R. D	THORNE, JOHN C	Kokomo.	R. D
Kern, Theo	Kokomo.	R. D	Tresslar, J. G.	Kokomo.	E. D
Kemp, Geo. W	Russiaville	R. 3	Walthall, John G.	Sycamore	R. D
Kirkpatrick, J. B.	Kokomo.	R. D	Ware, C. M	West Liberty	R. D
Lovett, John A	Kokomo.	R. 10	Wilson, R. Q	Kokomo.	R. D
Miller, A. W	Plevna.	E. D	Wright, J. W	Kokomo.	R. D
Miller, H. C.	Ervin	R. D			

Regular, 36; Eclectic, 6; Homeopathic, 1; Physio-Medical, 1; not reported, 3.

Jackson County.

Name.	*Post Office.*	*School.*
Anthony, Jas. R	Tampico	R. D
Bard, Thos. S.	Crothersville	R. 10
Barnes, Geo. O	Cortland	R. D
Blackwell, G. B	Seymour	E. D
Carter, Jas. H	Seymour	R. D
Casey, Wm. M	Seymour	R. D
Charles, Jasper N	Tampico	R. D
Charlton, S. H	Seymour	R. 10
Chute, Geo. H	Freetown	R. 10
Coryell, Samuel	Crothersville	R. D
Cwilis, W. H	Seymour	R. D
Cummings, D. J	Houstan	R. 10
Cummings, H. A	Mooney	P.-M. 3
Davis, J. H.	Azalia	R. 10
Ewing, F. M	Vallonia	R. 10
Gabbart, W. H	Tampico	E. D
Galbraith, T. S	Seymour	R. 10
Gerrish, M. F.	Seymour	R. D
Gibson, G. W.	Houstan	R. 10
Green, W. O	Dudleytown	R. 10
Hamilton, R. A	Brownstown.	N. R. 10
Hudson, L. H.		E. D
Jordan, Thos. W	Seymour	R. D
Kyte, H. R	Cortland.	P.-M. D
Manuel, Grafton	Freetown	E. 10
Martin, T. J		P.-M. D
May, Albert	Crothersville	R. D
McCormack, L. R	Crothersville	R. D
McMillan, I. P	Medora	R. 10
Monroe, V. H	Seymour	R. 10
Newkirk, A. L	Seymour	R. 10
Orvis, Geo. Q	Seymour	R. D
Osterman, A. C.	Dudleytown	R. D
Rains, Geo. W	Cortland	R. 3
Reed, E. P	Ewing	R. 10
Richards, T. J	Mooney	R. 10
Ruddick, L.	Reddington	R. D
Severinghaus, J. F	Seymour	N. R. 10
Shields, J. T	Seymour	R. 10
SHIELDS, J. M	Seymour	R. D
Shields, J. S	Seymour	R. D
Shipman, N. N	Seymour	R. D
Stilwell, J. A.	Brownstown	R 10
Tinch, E. T	Ewing	R. D
Warner, W. H	Crothersville	R. D
Wells, J. C	Mooney	R. D
Whitehead, W. E	Brownstown	R. D
Wilson, M. V	Medora	R. 10

Regular, 39; Eclectic, 4; Physio-Medical, 3; not reported, 2.

Jasper County.

Antrim, Thomas	Rensselaer	E. 10
Alter, Moses B	Rensselaer	R. D
Bitters, F. P	Rensselaer	R. D
Hartsell, W. W.	Rensselaer	H. D
Kidd, W. J		E. D.
Landon, Hannibal		R. D
Loughridge, J. H.	Rensselaer	R. 3
Martin, R. Y	Rensselaer	R. D
Maxwell, S. C.	Remington	R. D
Patton, David H	Remington	R. D
Reigle, Mack W	Remington	R. 3
Robbins, Ira B	Rose Lawn	H. 10
Shipman, E. F	Remington	R. D
Stockwell, Willeaid	Wheatfield	E. 10
WASHBURN, I. B	Rensselaer	R. D

Regular, 10; Eclectic, 3; Homeopathic, 2.

Jay County.

Able, Oscar E.	Bryant.	R. D
Anderson, James M	Dunkirk.	R. 10
Arthur, C. S	Portland	R. 3
Brown, H. V	Portland	R. D
Bosworth, J. M.	Pennville	R. D
Blackledge, L. N	Pennville	E. D
Blackledge, Amanda J	Pennville	E. D
Brayton, W. R	New Corydon	R. D
Clevenger, Benj. J	Red Key.	R. D
Connor, Norris F.	Red Key.	E. D
Crogan, John M	Dunkirk.	R. D
Dickes, Philip	Boundary	R. 3
Davis, R. P.	Portland	R. D
Dickes, John T.	Boundary.	R. D
Frame, John W	Dunkirk.	R. D
Glentzer, M. A	Bryant.	R. 10
Gillum, James	Portland.	E. 10
Gillum, S. A. D	Portland.	R. 3
Hutchens, Henry C.	Portland	E. 10
Horn, William C	Pennville	R. D
Hutchison, James A	Salamonia.	R. D
Hall, John W	Portland	R. D
Kinsey, David S	Portland	R. 3
Kidder, J. F	Mt. Pleasant	R. 10
Mackey, C. W	Portland	R. D
Milligan, A. A	Portland.	P.-M. D
Moon, Ezra.	Portland.	E. D
Miles, Jacob T	Bryant	R. D
Morehouse, John A	Portland.	P.-M. D
Munsey, Samuel E	Mt. Pleasant	R. 10
Mason, Samuel.	Pennville.	R. D
Mincks, F. W	Portland	H. 3
Poling, S. K	Portland	E. D
Rarick, Isaac N	Bluff Point	P.-M. D
Ralston, Augustus	New Corydon	R. D
Ross, John G	Westchester.	E. D
SIMS, I. G	Portland	R. D
Shepherd, T. S	Portland	R. 10
Shepherd, G. W	Red Key	R. 10
Stanton, D. S.	Portland	R. 10
Skinner, David T	Salamonia.	E. D
Selvey, Samuel S	Dunkirk.	R. D
Saunders, C. B	Pennville	P.-M. D
Stick, Jesse	Bryant	E. D
Smith, William	Portland	N. R. 10
Sage, Ira T	Red Key.	R. 10
Thomas, S. A.	Pennville	N. R. 10
White, T. C.	Powers.	R. 10
Wicks, James	Bryant	R. 10

Regular, 33; Eclectic, 9; Homeopathic, 1; Physio-Medical, 4; not reported, 2.

Jefferson County.

Name.	*Post Office.*	*School.*	*Name.*	*Post Office.*	*School.*
Bruckner, C. F	Madison	R.	Hutchinson, J. B.	Madison	H.
Burdsel, C. A.	Lancaster	R.	Hanna, Jas.	Madison	R.
Brengle, J. S	Hanover	R.	Johnson, A. H	Saluda	R.
Cooperrider, J	Madison	R.	Lander, W. G.	Brooksburg	R.
Conklin, E. L	Madison	E.	Lewis, J. R.	Madison	R.
Cornet, W.	Madison	R.	Lewis, G. O.	Madison	R.
Christie, J. H	Canaan	R.	Lewis, J. F	Dupont	R.
Dixon, Z. C.	Deputy	R.	Lewis, G. B.	Dupont	R.
Davis, J. L	Graham	R.	Lewis, S. B	Canaan	R.
Eastman, J. S	Hanover	R.	Mathews, Jas. H	Madison	R.
Flanders, Jno	Dupont	R.	MURETT, JAS. A	Madison	R.
Ford, S. M	Madison	R.	McCoy, Wm. A.	Madison	R.
Firth, C. C	Wirt	R.	Penn, B. F	Bryantsburg	R.
Forshee, Thos. W	Madison	R.	Tevis, E. R	Brooksburg	R.
Hewitt, Geo. W	Madison	R.	Townsend, T. M	Madison	N. R.
Hunt, H. S	Madison	R.	Wright, C. H	N'th Madison	N. R.
Hutchings, Wm	Madison	R.			

Regular, 29; Eclectic, 1; Homeopathic, 1; not reported, 2.

Jennings County.

Adams, Sylvester D	Brewersville	R. 3	Lefever, Jas. M	Paris	R. D
Amick, C. C	Six Mile	R. D	MITCHEL, J. F	Vernon	R. D
Cope, James P	Butlerville	R. D	Mitchel, Walter J	Vernon	R. D
Croyea, F. M	Zenas	E. 10	McGinty, John	North Vernon	R. D
Firsich, B	North Vernon	N. R. 10	Nelson, H. G	Butlerville	R. D
Fall, William	North Vernon	R. D	Reynolds, S. H	Scipio	R. D
Gaddy, N. D	Lovett	R. D	Richardson, N	Vernon	R. D
Gaddy, Orvill.	Paris Crossing	R. D	Richardson, W. H	Vernon	R. D
Green, Jas. H	North Vernon	R. D	Russell, Benj. F	Paris	R. D
Green, Charles H.	North Vernon	R. 3	Remy, Wm. H	Zenas	R. 3
Hanna, Jas. L	Paris Crossing	R. D	Spencer, J. A.	San Jacinto	R. D
Hicks, B. R.	Nebraska	P.-M. —	Shepherd, J. F	Scipio	N. R. 10
Kyle, James W	North Vernon	R. D	Wilson, Cyrus L	Lovett	R. D
Kendrick, N. C.	Butlerville	R. 10	Wiles, Christian H	Six Mile	R. D
Lyle, John M.	Cana	R. D	Wildman, Wm. H	San Jacinto	R. D
Light, Amos B	North Vernon	R. D			

Regular, 27; Eclectic, 1; Physio-Medical, 1; not reported, 2.

Johnson County.

Adams, J. H	Amity	N. R. 10	Miller, A	Whiteland	R. D
Adams, David	Edinburg	E. D	Marshall, J. A	Nineveh	N. R. 3
Beebe, James.	Whiteland	N. R. 10	Maze, T. B	Needham	N. R. 3
Bland, Jno. A	Edinburg	R. D	Mercer, J. T	Rochlane	R. D
Byers, R. S	Samaria	R. D	Noble, T. B	Greenwood	N. R. 10
Bogell, J. H	Edinburg	N. R. 3	Ott, L. E	Franklin	R. D
Covert, G. W	Whiteland	N. R. 3	Payne, P. W	Franklin	R. D
Carnes, Zachariah	Greenwood	R. D	Province, W. M	Providence	R. D
Cravens, J. R	Franklin	N. R. 3	Paine, Luther	Edinburg	E. D
Curry, Thomas W	Greenwood	R. D	Quick, R. S	Edinburg	E. D
Day, F. B	Franklin	R. D	Rush, W. P	Edinburg	R. D
Dunnell, Jno. H	Franklin	N. R. 10	Ream, J. B	Trafalgar	R. D
Dunnell, T. C	Franklin	R. D	Sadler, J. J	Edinburg	R. D
Dixon, Jno. W	Nineveh	R. D	Surface, O. B	Stone's Cros'g	N. R. 3
Dobyns, K P	Whiteland	R. D	Taggart, R	Franklin	R. D
Davis, A. T	Edinburg	N. R. 10	Telford, W. E	Bargersville	R. D
Farris, J. T	Bargersville	R. D	Wood, Jno. C	Franklin	R. D
Fisher, I. C.	Needham	R. D	Webb, W. A	Franklin	R. D
George, J. D	Franklin	H. D	Wishard, J. M	Greenwood	R. D
Hendricks, W. C	Greenwood	R. D	Wallace, B	Franklin	R. D
Hall, W. C	Franklin	R. D	Willan, R. D	Trafalgar	R. D
Hall, H. J	Franklin	R. D	Willan, E. B	Trafalgar	R. D
Hibbs, Irwin	Bluff Creek	N. R. 10	Whitesides, C. E	Edinburg	R. D
Jones, J. T	Franklin	R. D	Wright, A. F	Nineveh	R. D
Kegley, Jno. L	Stone's Cros'g	N. R. 3	WHITESIDES, L. L	Franklin	R. D
Lanam, J. H	Nineveh	R. D			

Regular, 34; Eclectic, 3; Homeopathic, 1; not reported, 13.

Knox County.

Name.	*Post Office.*	*School.*
Anderson, W. B	Edwardsport	R. D
Boyer, Eli	Vincennes	R. D
Beard, Schuyler C	Vincennes	R. D
Beard, Ferdinand W	Vincennes	R. D
Bussee, Edward P	Vincennes	R. D
Black, Elijah C	Wheatland	R. 10
Beaver, Elmira C. W	Vincennes	E. D
Beaver, John C.	Vincennes.	R. 10
Bedell, W. B	Vincennes	R. D
Barnett, John H	Monroe City.	R. 10
Cross, John F	Decker Station	R. 3
Dukate, John S	Wheatland	R. D
Ducate, John B. D	Wheatland	R. D
Dorsey, Geo. L	Bicknell	R. D
Davenport, W. H.	Vincennes	R. D
Davis, Oscar F	Decker Station	R. D
Flag, Alpheus D	Vincennes	H. D
Fairhurst, O'Connell.	Vincennes	R. D
Folks, Charles A	Vincennes	R. D
Grigsby, W. B	Oaktown	R. D
Harris, W. B	Vincennes	R. D
Hensley, John H	Vincennes	R. D
HARRIS, F. M.	Vincennes	R. D
Harrison, Samuel L	Vincennes	R. 10
Hunt, Thomas J	Pond Creek	R. 3
Henning, Geo. W	Bicknell	R. 3
Jessup, Robert B	Vincennes	R. D
Jessup, Robert B., Jr.	Vincennes	R. D
Keith, Benjamin F.	Edwardsport	R. D
Kessinger, Wm. E	Monroe City	R. D
Lissman, Samuel J.	Oaktown	R. D
Lissman, John W	Oaktown	R. D
Lytton, Jefferson.	Wheatland	R. 10
Merrett, James N	Oaktown	R. 10
Martin, Zadok G	Bruceville	R. D
McGauhy, Andrew J	Freelandsville	R. D
McDowell, James	Bruceville	R. D
Milam, John W	Bruceville	R. D
Martin, George F	Bruceville	R. D
McDowell, M. M	Freelandsville	R. D
Medcalf, Wm. M	Vincennes	H. D
Moore, Reuben G	Vincennes	R. D
Meyer, N. H	Freelandsv'le N.	R. 10
Owings, Thos. B	Oaktown	R. 3
Pugh, Jno. W	Oaktown	R. D
Robbins, Jno. F	Freelandsville	R. D
Randolph, Jno. A	Vincennes	R. D
Ray, Joel W	Emison	R. 10
Reeves, Jos. L	Edwardsport	R. D
Spaulding, Geo. L	Sanborn.	R. 3
Swartzell, Jos. A	Vincennes	R. D
Staley, L. B	Bicknell	R. D
Smith, Hubbard M.	Vincennes	R. D
Spaulding, Thos. S	Edwardsport	R. D
Trueblood, J. W	Monroe City.	R. 3
Van Tress, E. C	Monroe City.	R. D
Williams, James T.	Monroe City.	E. D

Regular, 52; Eclectic, 2; Homeopathic, 2; not reported, 1.

Kosciusko County.

Amiss, James M	Silver Lake	R. D
Becknell, I. J	Milford	R. D
Burket, C. W	Warsaw	R. D
Burkett, Benjamin	Warsaw	R. D
Bash, J. M	Warsaw	R. D
Bacon, Lyman B	Warsaw	R. D
Bowser, John M	Syracuse	R. D
Brown, George M	Claypool	R. D
Boydston, Benj. S	Clunette.	E. 10
Bigelow, Seth G	Silver Lake	E. 3
Barr, J. Wesley	Silver Lake	E. 10
Burley, George G.	Leesburg	R. 3
Byler, J. M.	Warsaw	H. D
Cammack, Thomas	Milford	R. D
Coons, Moses J.	Etna Green	P.-M. D
Chandler, J. A	Mentone.	R. 3
Clayton, Calvin M	Warsaw	E. 10
DAVISSON, J. H	Warsaw	R. D
Dick, Milford L	Pierceton	P.-M. D
Furlong, Marie J	Warsaw	E. D
Hazel, John B	Claypool	R. D
Hayes, William	Pierceton	E. D
Holloway, John M	Etna Green	E. D
Heffley, John W	Sevastopol	E. D
Irhig, Francis M	Syracuse	E. D
Junkins, Samuel B.	North Webster	R. 10
King, Hiram O	Pierceton	R. D
Ketchum, George	Claypool	R. D
Kelley, William M	Milwood	R. D
Keehn, Levi	Milford	H. 10
Kelley, David C	Syracuse.	E. 10
Long, Charles R	Pierceten	R. D
Moody, Theodore F	Pierceton	R. D
Moro, Francis	Warsaw	E. D
Marine, John W	Hepton	P.-M. D
Olney, Frederick E.	Warsaw	R. 3
Ogle, John J	North Webster	E. 10
Pearman, F. M	Palestine	R. D
Parks, John P	Atwood	R. D
Parker, J. W	Oswego	E. 10
Robinson, Andrew B	Mentone	R. D
Surguy, Allen B	Mentone	R. D
Swigart, Henry Mc	Atwood	R. D
Shackelford, L. J	Warsaw	R. D
Schoonover, Wm. R	Leesburg	R. D
Stockberger, Eman'l	Mentone	R. 3
Swyhart, Calvin M	Warsaw	P.-M. 10
Smith, James S	Warsaw	P.-M. D
Strain, Theodore W	Silver Lake	E. 10
Scott, William	Pierceton	E. 10
Terry, Percy E	Silver Lake	R. 3
Terry, Daniel E	Silver Lake	R. 10
Towl, Amos M	Sevastopol	R. 10
Tenant, Louis H	Pierceton	E. 10
Vaughn, Martin	Packerton.	R. 3
Webber, Irvin B	Warsaw	R. 10
Whitney, Lorenzo W.	Warsaw	R. D
Williams, Freeman S.	Burket	R. D
Woolley, Amos	Warsaw	E. D
Wright, Mark R	Silver Lake	E. 10

Regular, 35; Eclectic, 18; Homeopathic, 2; Physio-Medical, 5.

Lagrange County.

Name.	*Post Office.*	*School.*
Burden, Levi	Haw Patch	N. R. 10
Broughton, F. H	Wolcottville	R. D
Ballah, William J	Mongo	R. D
Benham, Frank A	Lagrange	R. D
Crane, Emma L	Lagrange	R. D
CASEBEER, H. M	Lagrange	R. D
Denny, Jno. N	Ligonier.	N. R. 3
Dryer, D. W	Lagrange	R. D
Dayton, G. H	Lima	R. D
Daucer, John	South Milford.	R. D
Engle, Jacob B	Lagrange	N. R. 10
Ferguson, W. A	Brighton	R. D
Grubb, W. B	Scott.	N. R. 10
Goodrich Chas. D	Lima	R. D
Hughes, William	Lima	R. D
McCoy, Walter T	Lagrange	R. D
Niman, Charles H	Lagrange	R. D
Niman, J. P	Lagrange	R. D
Price, Henry B	Woodruff	R. D
Raby, William	Wolcottville.	N. R. 10
Schrock, H. W	Shore	R. D
Short, John	Lagrange	R. D
Short, W. H	Lagrange	R. D
Spaulding, A M	Brushy Prairie	R. 10
Toms, Alpheus	Scott	R. D
Vaughan, Iris J	Haw Patch	R. D
White, E. G	Lagrange	R. D
Work, Samuel A	Wolcottville.	R. D
Youngkin, Jerome W	Wolcottville.	N. R. 10

Regular, 23; not reported, 6.

Lake County.

Name.	*Post Office.*	*School.*
Arnold, G. W	Hobart	E. D
Ball, H. S	Crown Point	E. D
BLISS, M. G	Crown Point	E. D
Bassett, G. R	Hobart	E. D
Bassett, S. A	Hobart	E. D
Bacon, E. R	Lowell	R. D
Carter, B. A	Crown Point	R. D
Davis, J. E	Lowell	R. D
Gordon, P. P	Hobart	R. D
Gerrish, A. A.	Lowell	R. D
Groman, Charles	Brunswick	H. 10
Higgins, Jno	Crown Point	R. D
Hill, J. L	Creston	R. D
Johns, J. W	Dyer	R. D
Iddings, J. L	Merrillville	R. D
Miller, H. F. C	Hobart	R. D
Mackey, R. C.	Deep River	E. D
Merrill, W. W	Hammond	E. D
Pratt, A. J	Crown Point	R. D
Pettibone, Harvey	Crown Point	R. 3
Pettibone, Henry	Crown Point	R. D
Seidler, A	Dyer.	R. 10
Vandewalker, J. G.	Hammond	E. D
Wood, James.	Lowell	R. 10

Regular, 15; Eclectic, 8; Homeopathic, 1.

Laporte County.

Name.	*Post Office.*	*School.*
Andrew, George L	Laporte	R. D
ANNIS, E. L.	Laporte	R. D
Brown, D. T	Michigan City	R. D
Bowell, B. C	Rolling Prairie	E. D
Crandall, R. O	Laporte	R. 10
Crumpacker, D. S	Union Mills	R. 10
Cole, E. Z	Michigan City	H. D
Calvert, R. H.	Michigan City	R. D
Darling, N. S.	Laporte	R. D
Dakin, George M.	Laporte	E. D
Ellsworth, H. N	Kingsbury	R. D
Fisher, W. H	Wanatah	R. D
Freeman, B. B	Westville	H. 10
Fravel, Theophilus	Westville	R. D
Fahnestock, Camillus	Laporte	H. D
Fahnestock, Aug'sts	Laporte	H. D
Godfrey, W. R	Michigan City	R. D
Hollenbeck, B. W	Westville	E. 3
Jones, R. W	Union Mills	R. D
Keene, Lorenzo	Laporte	R. D
Lambert, J. W	Laporte	R. D
Ludwig, C. H	Laporte	H. D
Martin, J. S	Rolling Prairie	R. 10
Meyer, Johaum	Laporte	R. D
Mullen, A. J	Michigan City	R. D
Rose, Landon C	Laporte	R. D
Rude, R. H	Laporte	R. 10
Rogers, E. A	Laporte	R. D
Schmid, A. S	Michigan City	R. D
Schultz, Henry.	Michigan City	R. 10
Sharples, P. D	Rolling Prairie	R. 10
Sovereign, L. A	Michigan City	R. 10
Stevenson, A. G	Laporte	R. D
Stevens, M. A	Laporte	E. D
Tilden, Jno F	Wanatah	R. 10
Tillottson, A. G	Michigan City	E. D
Warren, C. R.	Otis	R. D
Whitney, S. C	Laporte	H. D
Wilson, W. B	Rolling Prairie	E. 10

Regular, 27; Eclectic, 6; Homeopathic, 6.

Lawrence County.

Name.	*Post Office.*	*School.*
Allen, E. T	Fayetteville	R. D
Burton, W. A	Mitchell	R. D
BURTON, G. W	Mitchell	R. D
Bare, Addison W	Bryantsville	R. D
Butler, S. W	Huron	R. D
Cummings, H. A		R. D
Dixon, Henry C	Tunnelton	R. D
Donica, Thos. M	Ft. Ritner	R. 10
Ellison, W. T	Heltonville	R. D
Fanbion, James	Heltonville	R. 10
Faucette, Jas. H	Williams	R. D
Gardner, Joseph	Bedford	R. D
Hunter, F. Sheldon	Ft. Ritner	R. D
Hornocker, S. D	Silverville	R. 10
Larkin, John B	Mitchell	R. D
Lowder, Cyrus	Springville	R. 3
McIntire, Elihu S	Mitchell	R. D
McDonald, A. J	Mitchell	R. D
Newland, John W	Bedford	R. D
Newland, Benjamin	Bedford	R. D
Newland, Chas. W		R. D
Pearson, James C	Mitchell	R. D
Phipps, John W	Heltonville	R. D
Rariden, Samuel A.	Bedford	R. 10
Rariden, Chas. E	Bedford	R. D
Smith, W. H	Leesville	R. 10
Smith, S. W	Leesville	R. D
Voyles, Harvey	Fayetteville	R. D
Yost, J. L. W	Mitchell	R. D

Regular, 29.

Martin County.

Name.	*Post Office.*	*School.*
Brittain, S. H	Loogootee	R. D
Campbell, J. C. L	Loogootee	R. 3
Dollins, T. C	Trinity Springs	R. 3
Gray, Wm	South Marton	R. 10
McPherson, L	Trinity Springs	R. D
McNabb, O. H	Kecksville	R. D
Plummer, R. S	Shoals	R. D
Plummer, I. N	Shoals	R. D
Porter, A. W	Loogootee	E. D
Shirley, H. W	Shoals	R. D
Solomon, J. J	Shoals	P.-M. D
Sims, J. N	Dover Hill	E. 3
Trueblood, J. C	Loogootee	R. D
Thomas, Wm	Kecksville	R. 10
Walker, Jas. K	Loogootee	R. D
WALLS, G. W	Shoals	R. D
Yenne, C. H	Shoals	R. D

Regular, 14; Eclectic, 2; Physio-Medical, 1.

Madison County.

Name.	*Post Office.*	*School.*
Aldred, John A	Fishersburg	R. D
Alexander, L. E	Pendleton	R. D
Armfield, John D	Elwood	R. 10
Armington, C. L	Chesterfield	R. 3
Atherton, R. M	Anderson	H. D
Branch, C. N	Perkinsville	R. D
Brandon, J. F	Anderson	R. 3
Brickley, W. P	Anderson	P.-M. 10
Broadbent, Oliver	Anderson	R. D
Brown, Martin	Funks	R. D
Carter, D. M	Anderson	R. D
Calloway, Beniah	Elwood	R. 10
Chiles, B. F.	Frankton	P.-M. D
Chittenden, G. F	Anderson	R. D
Cook, Daniel	Fishersburg	R. 10
Cook, John W	Pendleton	R. D
Cook, Benj. H	Rigdon	R. D
Cook, Ward.	Pendleton	R. D
Clark, Thos. J	Summitville	E. 10
Covertson, J. W	Frankton	R. 10
Cranfill, M. L.	Summitville	N. R. 10
Cullen, John C	Anderson	R. D
Davidson, G. N.	Pendleton	P.-M. D
DIVEN, C. E	Anderson	R. D
Ebert, John D	Dundee	R. 10
Edwins, S. W	Frankton	R. D
French, Wm. J	Frankton	R. D
Fussell, Benj. F	Markleville	R. D
Garretson, W. M	Perkinsville	R. D
Guisinger, J. S	Florida	R. 10
Harter, W. P	Anderson	R. 3
Harter, Jacob H	Anderson	R. 3
Hilligoss, G. N	Lapelle	R. 3
Hockett, Zimri	Anderson	P.-M. D
Heuston, A. S	Pendleton	P.-M. D
Hougham, John S	Perkinsville	E. D
Hunt, John W	Alexandria	R. D
Hunt, Wm. A.	Anderson	R. 3
Hunt, Thos. M	Summitville	R. 3
Jones, Horace E	Anderson	R. D
Lewis, W. H	Pendleton	R. D
Mann, J. E	Elwood	H. D
Manring, N. H	Rigdon	R. D
McGranahan, G. W	Elwood	R. D
McTurnan, M. G	Rigdon	R. 10
Marlow, A. F	Summitville	E. D
Milliken, J. H	Elwood	R. D
Nuzum, D. P	Elwood	E. D
Perry, Andrew, J.	Alexandria	R. D
Perry, John W	Alexandria	R. D
Pugh, J. W	Alexandria	R. D
Pugh, Joseph	Alexandria	R. 3
Petro, Benj. L	Ovid	R. 10
Rogers, Ellen P.	Pendleton	N. R. 10
Rider, D. M	Anderson	R. 10
Runyan, J. F	Alexandria	P.-M. D
Saunders, Joseph.	Anderson	R. D
Shultz, J. B.	Elwood	E. D
Sigler, Daniel	Elwood	R. D
Stephenson, Joseph	Pendleton	R. D
Stewart, Jonas	Anderson	R. D
Spann, B. F.	Anderson	R. D
Suman, Wm	Anderson	R. 3
Swallow, G. E	Summitville	R. D
Vanmeter, I. N.	Florida	R. 3
Wickersham, N. L	Anderson	R. D

Regular, 51; Eclectic, 5; Physio-Medical, 6; Homeopathic, 2; not reported, 2.

Marshall County.

Name.	*Post Office.*	*School.*
Arlington, J. W	Walkerton	R. D
Babcock, I. L.	Maxinkuckee	R. D
Baker, Joseph	Plymouth	N. R. 10
Barton, T. A	Plymouth	R. 10
Bell, John T	Inwood	R. 10
Bower, Isaiah	Plymouth	R. 10
Brooke, J. E	Plymouth	R. D
Caillat, Victor	Argos	R. 10
Chapman, Clark	Argos	R. 10
Denniston, J. M	LaPaz	R. 10
Dietrich, W. A	Bremen	R. D
Dicks, Jas. T	Plymouth	H. D
Dunlap, E	Plymouth	R. 10
Eaton, R. B	Argos	R. 10
Eidson, J. W	Bourbon	R. D
Endley, J. T	Walkerton	N. R. D
France, Samuel	Bourbon	R. D
Gould, S. W	Argos	R. D
Hamilton, J. J	Linkville	R. D
Herring, N. A	Bremen	E. D
Hollezendorf, A. C	Plymouth	R. D
Johnson, J. H	Plymouth	E. 10
Johnson, Luther	Bourbon	R. 10
Knott, D. C	Burr Oak	E. D
Latham, A	Ilion	N. R. 10
Linn, T. T	Bourbon	R. D
Matchett, A. C	Bourbon	R. D
May, S. A	Donaldson	E. D
McElrath, M. F.	Plymouth	R. 3
Miller, L. E.	Bremen	N. R. 10
Moore, Allen	LaPaz	R. D
Moore, C. W	Walkerton	R. D
Neville, Ralph	Teegarden	R. 10
Oyler, W. A.	Argos	R. 3
Palmer, D. B	LaPaz	N. R. D
Peck, M. E	Bourbon	R. 3
Pocock, E. H	Walnut	R. D
Rea, Oliver A.	Marmont	R. D
Richardson, D. R.	Tyner City	H. D
Richey, S. R	Donaldson	R. 10
Richmond, C. M	Walkerton	N. R. D
REYNOLDS, G. R	Plymouth	R. D
Short, Robt. B	Bourbon	R. D
Smith, J. W		R. D
Spencer, E	Bourbon	N. R. 10
Spencer, Joseph	Ilion	N. R. 10
Sutton, J. A	Argos	R. 10
Viets, E. W	Plymouth	N. R. D
Wall, G. F	Bremen	R. D
Wilson, J. H	Plymouth	R. D
Wiseman, B. W.	Marmont	R. D
Younkman, A. B	Bremen	R. D

Regular, 37; Eclectic, 4; Homeopathic, 2; not reported, 9.

Marion County.

Name.	*Post Office.*	*School.*
Abbett, C. H	Indianapolis	E. 3
Abbett, F. M	Indianapolis	R. D
Abbett, L	Indianapolis	E. D
Allen, H. R.	Indianapolis	R. 3
Allen, Wesley	West Newton	R. D
Anderson, Jas. E	Indianapolis.	N. R. D
Anthony, E.	Indianapolis.	P.-M. D
Bacon, E. H	Indianapolis.	N. R. 10
Bailey, W. P	Southport	R. D
Ball, A. W	Indianapolis	R. D
Ballard, J. H	Indianapolis	R. D
Barnes, C. A	Brightwood	R. D
Barnes, H. F	Indianapolis	R. D
Bates, J. W	Broad Ripple	R. D
Bedford, C. T.	Indianapolis.	P.-M. D
Bell, Guido.	Indianapolis	R. D
Bennett, Peter S	Indianapolis.	N. R. 10
Bobbs, A. J	Indianapolis	R. D
Bower, John V	Millersville	R. D
Boyd, J. T	Indianapolis	R. D
Bigelow, J. K.	Indianapolis	R. D
Bigger, Robt. H	Indianapolis	R. D
Brayton, A. W	Indianapolis	R. D
Brennen, E. J	Indianapolis	R. D
Brees, J. T.	Indianapolis	N. R
Briggs, E. E		H. D
Brown, C. S.	Gallaudet	H. D
Brown, George J	Indianapolis.	N. R. 3
Brown, H. J	Indianapolis	R. D
Brown, John L	Indianapolis	R. D
Brown, John R.	Insane Hospital.	R. D
Brown, J. S.	Indianapolis	R. 3
Brown, S. M	Gallaudet	R. 10
Brown, W. M.	Indianapolis	E. D
Browning, W. J	Indianapolis	R. D
Blair, John M		R. D
Blu, U. L	Indianapolis.	N. R. 10
Bryan, D. C.	Indianapolis	R. D
Bryan, T. N.	Indianapolis	R. D
Bryant, Jas.	Indianapolis.	N. R. 10
Bula, R. W	Indianapolis.	N. R. 10
Butterfield, S. A	Indianapolis	R. D
Cameron, John J	Indianapolis	— D
Campbell, L. S	Indianapolis	R. D
Cary, George A.	Indianapolis	R. D
Carson, L. O	Traders Point	R. D
Case, L. B	Indianapolis	R. 3
Carter, James	Indianapolis	R. 3
Carwin, James N	Indianapolis.	N. R. 10
Chambers, John	Indianapolis	R. D
Clarke, Wm. B	Indianapolis	H. D
Clarke, W. H	Indianopolis.	N. R. 10
Clemmer, F. O	Indianapolis	H. D
Cline, L. C	Indianapolis	R. D
Cloud, C. F	Indianapolis.	N. R. 10
Coble, George A	New Augusta	R. D
Comingor, J. A	Indianapolis	R. D
Cook, George J	Indianapolis	R. D
Corliss, C. T	Indianapolis	H. 10
Compton, J. A	Indianapolis	H. D
Coombs, George W	Indianapolis	R. D
Cooper, C. A	Indianapolis.	N. R. 10
Corey, A. F	Oaklandon	E. D
Cress, John B.	Indianapolis	E. D
Crist, D. O	Indianapolis	R. D
Culbertson, J. W	Indianapolis.	N. R. 10
Culver, T. M		E. D
Cunningham, H. S	Indianapolis	R. D
Darrack, George M.	Cumberland.	R. 10
Davis, Samuel	Indianapolis	R. D
Daugherty, J. H	Irvington	R. D
Denke-Walter, Wm	Indianapolis.	N. R. D
DePuey, A. H.		E. D
Divens, C. W		E. 3
Duncan, Hiram	Indianapolis	R. D
Dunlap, J. M	Indianapolis	R. D
Dunning, J. A	Indianapolis	R. D

Name.	*Post Office.*	*School.*
Earp, S. E	Indianapolis	R. D
Eastman, Joseph	Indianapolis	R. D
Edenharter, G. F.	Indianapolis	P.-M. D
Elbert, S. A	Indianapolis	R. D
Elder, E. S	Indianapolis	R. D
Ellis, J. W	Indianapolis	R. D
Ewing, C. K	Malott Park	R. D
Farmer, S. W	Indianapolis	E. D
Featherston, J. R	Indianapolis	R. D
Feree. Shadrock L	Indianapalis	R. D
Feree. F. M.	Indianapolis	R. D
Ferguson, F. G	Indianapolis	R. D
Field, M. H.	Indianapolis	R. D
Field, N. E	Cumberland	R. D
Fisher, Amos W	Indianapolis	P.-M. D
Fletcher, C. J.	Indianapolis	R. D
Fletcher, W. B	Indianapolis	R. D
Freitshe, J. M	Indianapolis	H. 10
French, M. J	Indianapolis	R. D
Funkhouser, D	Indianapolis	R. D
Garver, J. J	Indianapolis	R. D
Gill, John	Indianapolis.	N. R. 10
Ging, William	Iddianapolis.	N. R. 3
Gooden, W. F		— D
Graydon, R. W	Southport	R. D
Greater, G. A	Indianapolis	R. D
Griggs, Oscar B.	Bridgeport	R. D
Hadley, Eran	Indianapolis	R. D
Haggart, David.	Indianapolis	H. D
Haslep, Marietta	Indianapolis	R. D
Hasty, George	Indianapolis	P.-M. D
Haugh, J. A	Indianapolis	R. D
Haughton, R. E	Indianapolis	R. D
Harvey, T. B	Indianapolis	R. D
Haymond, W. S	Indianapolis	R. D
Haynes, J. R	Indianapolis	H. D
Hays, W. F	Indianapolis	R. D
Heath, John P		R. D
Hendricks, W. W.	Indianapolis	E. D
Hendricks, W. F		— D
Heil, C. P.	Indianapolis	E. D
Helming, Herman	Indianapolis.	N. R. 10
Heltman, J. K	Oaklandon	R. D
Henthorne, L. S	Indianapolis	R. D
Hervey, J. W.	Indianapolis	R. D
Hettenger, J. B.	Indianapolis.	N. R. 10
Hodges, E. F	Indianapolis	R. D
Hoover, John E	Indianapolis	R. D
Hoss, J. V	Indianapolis	R. D
Houser, J. A	Indianapolis	E. D
Howard, Edward	Indianapolis	E. D
Hinshaw, T. M	Nora	R. D
Hurley, M. F	Indianapolis	E. 3
Jameson, Henry	Indianapolis	R. D
Jameson, P. H	Indianapolis	R. D
Jeffries, W. E.	Indianapolis	R. D
Johnson, W. H	Indianapolis	R. D
Johnson, W. P	Indianapolis	R. 3
Jordan, J. S	Indianapolis	E. D
Jones, Stephen	Indianapolis	E. D
Keegan, J. A	Indianapolis	R. D
Kerley, R. M.		N. R. D
Kennedy, John Y	Acton	R. D
Kendrick, W. H	Indianapolis	E. D
Kidd, W. J	Indianapolis	E. D
Kindleberger, W. H	Indianapolis	H. D
Kiskaldee, H. S		N. R. D
Kitchen, J. M.	Indianapolis	R. D
Koch, A. J.		P.-M. D
Krumrine, J. A	Irvington	R. D
Lampton, Geo. W	Brightwood	N. R. 10
Lewis, J. C	Indianapolis	N. R. 10
Light, Robt. C	Broad Ripple	R. 3
Lockridge, J. E.	Indianapolis	R. D
Long, Henry	Indianapolis	E. D
Long, J. B	Indianapolis	R. D
Long, R. W	Irvington	R. D

Marion County—Continued.

Name.	*Post Office.*	*School.*
Loper, F. M.	Indianapolis	R. D
Lutz, G. W	Indianapolis	R. D
Lyle, A. W	Castleton	R. D
Mapes, S. H.	Lawrence	R. D
Manker, F. E	Indianapolis	R. D
Marsee, J. W	Indianapolis	R. D
Martin, Francis	Indianapolis	R. D
Martin, Herman H	Indianapolis	R. D
Martin, W. H	Indianapolis	R. D
Maxwell, Allison	Indianapolis	R. D
Mendenhall, H. E	Indianapolis	R. D
Metcalf, C. S	Indianapolis	R. D
McCabe, H H	Indianapolis	E. D
McClure, C. B	Indianapolis	R. D
McDonald, W. B	New Augusta	R. D
McGaughey, Sam'l.	Acton	R. D
McNutt, W. Y	Southport	R. D
Miller, E. T.	Indianapolis.	N. R. 10
Minich, J. A	Indianapolis.	N. R. 10
Moffett, N. C	Indianapolis	E. D
Moore, M. W	Indianapolis	R. D
Moore, S. H	Indianapolis	R. D
Moore, Thos	Indianapolis.	N. R. 10
Moore, W. G	Indianapolis	R. D
Monroe, J. A	Indianapolis	R. D
Morgan, W. V	Julietta	R. D
Morrow, J. E	Indianapolis	R. D
Morrison, F. A	Indianapolis	R. D
Neff, David	Indianapolis.	N. R. 10
Nesbit, J. A.	Castleton	R. D
Noble, Edward	Indianapolis	E. D
Noble, Thos. B	Greenwood	R. 3
New, Geo. W	Indianapolis	R. D
Newcomer, F. S	Indianapolis	R. D
Oliver, D. H	Indianapolis	R. D
Oliver, John H.	Indianapolis	R. D
Painter, Berry	Indianapolis	P.-M. D
Park, H. A S	Indianapolis	E. D
Partlow, John W	Indianapolis	R. D
Parsons, John S	Indianapolis.	N. R. 10
Patterson, A. W	Indianapolis	R. D
Peachee, Harrison	Maywood	R. 10
Pearson, Chas. D	Indianapolis	R. D
Perry, Ralph S	Indianapolis	R. D
Pettijohn, B. O	Indianapolis	R. D
Pfaff, O. G	Indianapolis	R. D
Pickerill, G. W	Indianapolis	E. D
Porter, Edward D	Indianapolis	R. D
Porter, C. N.	Indianapolis	R. D
Purman, D. M	Indianapolis	R. D
Prunk, D. H	Indianapolis	E. D
Ratcliff, Barclay	West Newton	R. D
Reade, Jeremiah	Traders Point.	R. D
Reyer, E. C	Indianapolis	R. D
Reynolds, G. W	Indianapolis	R. D
Ridpath, H. W	Indianapolis	R. D
Robbins, Clark		N. R. 10
Robbins, Wesley	Indianapolis	E. D
Robinson, W. J.	Indianapolis	E. D
Roesgen, John P.		N. R. 10
Rooker, C. N	Indianapolis	R. D
Rooker, J. I	Castleton	R. D
Rowe, L. M	Indianapolis	R. D
Rowley, Wm		H. D
Runnels, O. S	Indianapolis	H. D
Schmidt, E	Indianapolis	R. D
Seller, T. P	Indianapolis	R. D
Selman, A. J	Indianapolis.	N. R. 10
Semple, W. T.	Indianapolis	R. D
Serrin, J. S	Indianapolis	R. D
Sharp, C. C	Indianapolis	E. D
Silvery, H	Castleton	N. R. 3
Sims, J. T		R D
Smith, A. J	Castleton	E. D
Spees, Geo	Glens Valley	R. D
Spicer, J. W	Acton	R. D
Stein, Fred	Indianapolis	R. D
Stockton, Sarah	Indianapolis	R. D
Stillson, J. O	Indianapolis	R. D
Stone, R. French	Indianapolis	R. D
Stratford, Alfred	Indianapolis	R. D
Stratford, I. W	Indianapolis	R. D
Swain, Rachel	Indianapolis	E. D
Sutcliffe, J. A	Indianapolis	R. D
Taylor, Jas. H	Indianapolis	R. D
Tevis, Joel T	Indianapolis	R. D
Theel, Joseph	Indianapolis	E. D
Thomas, A. J.	Indianapolis	R. D
Thomas, E. C.	Haughville	R. D
Thomas, W. H	Indianapolis	R. D
Thompson, D. A	Indianapolis	R. D
Thompson, J. L	Indianapolis	R. D
Thompson, W. C	Indianapolis	R. D
Tingley, W. S.	Indianapolis	R. D
Todd, L. L	Indianapolis	R. D
Tolley, W. V	Indianapolis	R. D
Wagner, T. A.	Indianapolis	R. D
Waide, Robt	Indianapolis	P.-M. D
Walker, I. C	Indianapolis	R. D
Walker, J. B	Indianapolis	R. D
Walker, John C	Indianapolis	R. D
Wall, David	Clermont	R. D
Wall, J. S.	Indianapolis	E. D
Walling, Willoughby	Indianapolis	R. D
Walters, P. J	Indianapolis	R. D
Wands, W	Indianapolis	R. D
Ward, Albert O	Southport.	R. D
Waterman, L. D	Indianapolis	R. D
Watson, T. N	Indianapolis	R. D
Webb, Joshua	Indianapolis.	N. R. 10
Wehrman, E. A	Indianapolis	H. D
Weiss, Chris. G	Indianapolis	R. D
Westhoelter, C. A	Indianapolis.	N. R. 3
White, Silas M	Indianapolis	P.-M. D
Wiley, Delaney.	Indianapolis	R. D
Williams, R. T	Indianapolis.	N. R. 10
Williamson, J. W	Indianapolis	E. D
Wishard, W. A	Indianapolis	R. D
Wishard, W. H	Indianapolis	R. D
Wood, W. C.	Haughville	E. D
Wood, Levi.	Indianapolis	P.-M. D
Wood, N. S	Indianapolis	R. D
Wood, Wilber F	Haughville	E. D
Woodard, A. A	Indianapolis	P.-M. D
Woodard, S. G	Indianapolis	R. D
Woodburn, Jas. H	Indianapolis	R. D
Woolen, G. V.	Indianapolis	R. D
Wright, C. E	Indianapolis	R. D
Yoke, C	Bridgeport	R. D
Youart, J. D	Indianapolis	R. 3
Zaring, C. F	Indianapolis	R. D

Regular, 192; Eclectic, 34; Homeopathic, 13; Physio-Medical, 11; not reported, 37.

Miami County.

Name.	Post Office.	School.
Alford, Henry	Peru	E. 10
Ager, U. A	Perrysburg	R. D
Armstrong, W. K.	Mexico	R. 3
Armstrong, A	Miami	R. 10
Brenton, W. H	Peru	R. D
BLOOMFIELD, E. M	Peru	R. D
Black, F. M	Reserve	E. D
Boggs, Milton M	Macy	R. 10
Belew, John C	Chili	E. 10
Barnes, John	Macy	N. R. 10
Brady, C. C	Gilead	R. D
Baldwin, J. A	Amboy	E. 10
Coe, A. D	Mexico	R. D
Campbell, E. L.	Miami	R. 3
Cain, J. C.	Bunker Hill	R. D
Davis, S. H	Miami	E. D
Davis, G. W	Miami	E. D
Ellis, J. W	Peru	E. D
Friermood, E. K	Amboy	R. D
Friermood, S. M	Santa Fe	R. D
Frets, J. C	Deedsville	R. 3
Graham, B. R	Peru	R. D
Gray, A. J	North Grove	R. 3
Graves, A. E	Peru	R. D
Higgins, C. B.	Peru	R. D
Helm, John H	Peru	R. D
Ijams, Thomas F	North Grove	R. D
Kimball, A. D	Xenia	R. D
LaDue, J	Denver	R. 10
Litzenberge, D. P.	Xenia	R. 3
Marsh, S. S	Peru	R. D
Meek, James A.	Bunker Hill	R. D
Maughmer, G. C	Waupecong	R. D
McDowell, H. P	Bunker Hill	R. D
Pence, Rollin	Peru	R. 10
Passage, H. V	Peru	R. D
Pretzinge, J. R.	Peru	E. D
Peters, R. J. D	Macy	N. R. 10
Rutherford, C. E	Peru	H. D
Ramsey, S. G.	Peru	R. D
Ross, R. H	Bennetts	R. D
Robbins, J. Q. A	Denver	R. D
Ridenour, David	Chili	R. D
Smith, R. W	Xenia	R. D
Smith, A. F.	Waupecong	R. D
Stafford, M. A	Peru	H. 3
Sutton, E. H	Macy	R. 10
Spooner, Jared	Peru	R. D
Stafford, Isabel A	Peru	H. D
Snook, O. F.	Denver	N. R. 10
Watkins, F. W	Peru	E. 10
Wilson, W. T.	Bunker Hill	R. D
Wareham, J. W	Gilead	R. 10
Waite, J. C	Chili	R. D
Wilson, J. S	Macy	E. 3

Regular, 39; Eclectic, 10; Homeopathic, 3; not reported, 3.

Monroe County.

Name.	Post Office.	School.
Axtell, A. J.	Bloomington	R. 10
Barrow, David	Unionville	R. 3
Brannam, Jonathan	Bryant's Creek	R. 10
Blackwell, G. B	South Grange	E. D
Bryan, George W.	Bloomington	R. D
Campbell, J. B	Unionville	R. 10
Dodd, James	Clear Creek	R. D
Dodds, James F	Bloomington	R. 10
Farr. A. C	Bryant's Creek	R. 3
Gaston, James H	Stanford	R. D
Harris, John J	Ellettsville	R. 10
Harris, R. C	Ellettsville	R. 10
Harris, John E	Bloomington	R. D
Humston, S. R	Smithville	R. 10
Lowder, L. T	Harrodsburg	R. D
Maxwell, Jas. D., Sr	Bloomington	R. D
Maxwell, Jas. D., Jr	Bloomington	R. D
McPheeters, J. G., Sr.	Bloomington	R. D
McLahlan, C. D	Harrodsburg	R. 10
Oliphant, P. T	Buena Vista.	E. 3
Rogers, Jos. M	Bloomington	R. D
Rice, Nathan L.	Dudley	E. D
Simpson, John P	Harrodsburg	R. D
Tourner, John P	Bloomington	E. 10
WEIR, ROBERT M	Bloomington	R. D
Whitted, Wm. L	Ellettsville	R. D
Warring, John W	Smithville	R. 10

Regular, 23; Eclectic, 4.

Montgomery County.

Name.	Post Office.	School.
Beally, James L	Crawfordsville	R. D
Brown, L. T	Alamo	R. D
Berryman, James A	Potato Creek	R. 10
Brown, Israel L	Alamo	R. D
Black, Dayton R	New Richmond	R. D
Burroughs, W. H	Shannondale	R. 3
Bowers, Homer	New Ross	R. D
Bronaugh, Chas. F	New Ross	R. D
Ball, Zopher	Waveland	R. D
Bilbo, John W	Waveland	R. 3
Cowan, Edward H	Crawfordsville	R. D
Chambers, Wm. B	Crawfordsville	H. D
Currie, John H.	Darlington	R. 10
Culver, Dudley M	Crawfordsville	R. D
Claypool, Joseph S	Waynetown	R. 3
Delchon, Irvin A	Crawfordsville	R. D
Dingman, James O	Linden	R. D
Donaldson, Jos. W	Ladoga	R. D
Dewey, George W	Crawfordsville	R. 3
Detchon, S. S	New Richmond	R. 10
Duncan, Joseph R	Crawfordsville	E. D
Drake, Moses C	Ladoga	R. D
Dunlavy, Ira C	Waveland	R. D
Dunnington, R. C	Crawfordsville	R. D
Eddingfield, Geo. W	Mace	R. D
Etter, Jacob R	Crawfordsville	R. D
Ensminger, Samuel S.	Crawfordsville	R. D
Ensminger, John.	Wingate	R. D
Fitch, Alexander.	Waynetown	R. D
Gott, William L	Crawfordsville	H. D
Griffith, M. E. H	Darlington	R. D
Griffith, Thomas J	Darlington	R. D
Hutchings, Benj. F.	Crawfordsville	R. D
Henry, Abigal F	Crawfordsville	R. D
Hetrick, Jacob	Crawfordsville	R. D
Hopper, Milton S.	Darlington	R. D
Hoover, Mary	Crawfordsville	R. D
Hillis, James D	Darlington	R. D
Hurt, Wm. J	Waynetown	R. D
Hamilton, A. N	Waynetown	R. D
Hyton, W. H	Parkersburg	R. 10
Irwin, Samuel G	Crawfordsville	R. D
Jones, Oliver H	Crawfordsville	R. D
Keegan. Enoch W	Crawfordsville	R. D
Keene, David	Crawfordsville	E. 10
Keeney, Henry	Linden	R. 10

Montgomery County—Continued.

Name.	*Post Office.*	*School.*
Keiser, A. J	Waveland	R. D
King, Richard T	New Ross	R. D
Layne, Preston	Crawfordsville	E. 10
Lewis, Edwin R	Crawfordsville	R. D
Leech, Thomas J	Waveland	R. D
MONTAGUE, F. T	Crawfordsville	R. D
May, Willis L	Crawfordsville	R D
Morgan, Samuel B	Crawfordsville	R. D
Mahoney, John C	Ladoga	R. D
Moore, Americus	Whitesville	R. D
McMechan, James G	Crawfordsville	R. D
Naylor, I. E. G	Darlington	R. 10
Olin, Leverette	Elmdale	R. D
Oxley, Joseph H	Elmdale	R. 10
Olinger, David F	Brown's Valley	R. 3
Ousley, Wm. I	Crawfordsville	R. D
Purviance, Sam'l. W.	Crawfordsville	R. D
Phillips, C. A.	Whitlock	R. 10
Ristine, Wm. H	Crawfordsville	R. D
Russell, Joseph R	Waveland	R. 10
Straughn, Kent R	Brown's Valley	R. D
Straughn, John W	Parkersburg	R. D
Shannon, Joseph J	Shannondale	R. 3
Sutherlin, James F	Ladoga	R. D
Taylor, John W	Crawfordsville	H. D
Thornberry, John R	Crawfordsville	R. 3
Talbot, J. N	Alamo.	R. D
Trumbly, David G	Mace	E. D
Tucker, George W	Brown's Valley	R. 3
Van Nuys, John D	Waveland.	R. D
Wilhite, Mary H	Crawfordsville	R. D
Washborn, E. P	New Richmond	R. 10
Willson, John B	Ladoga	R. D
Walden, Charles H	New Market	R. D
Young, Dudley	New Market	R. 3

Regular, 74; Eclectic, 4; Homeopathic, 3.

Morgan County.

Blackstone, Benj. D	Martinsville	R. D
Banta, Wm. C	Martinsville	R. 10
Bridges, A. P. W	Alaska	R. 3
Cure, H. W	Martinsville	R. 10
Farr, U. H	Martinsville	R. D
Gravis, Chas. M	Martinsville	R. D
Green, E. V	Martinsville	R. D
Green, James L	Morgantown	R. D
Griffith, Reuben C	Morgantown	R. D
Grim, J. G	Waverly	R. D
Hendricks, W. E	Martinsville	R. D
Houston, J. R	Martinsville	R. 10
Henson, Theo	Alaska	R. D
Holman, Chas. C	Martinsville	R. 3
Holliday, Thos. F	Monrovia	R. D
Horton, Ellis	Monrovia	R. D
Jones, Howard C	Hall	R. D
JOHNSON, J. J	Martinsville	R. D
Johnson, James J	Martinsville	R. D
Kennedy, D. P	Martinsville	E. D
Kennedy, John	Paragon	E. 10
Kessinger, C. A	Martinsville	R. D
Leathers, D. A	Mooresville	R. 3
Lindley, C. M	Brooklyn	R. D
Monical, Grant	Brooklyn	R. D
Murphy, Wm. H	Morgantown	R. D
Mahorney, John W	Eminence	R. D
Mills, Seth	Monrovia	R. D
McAllister, Alex	Eminence	E. 10
McDonald, D. H	Eminence	R. D
McNabb, Philip	Mooresville	R. D
Pottorff, Wm. A	Eminence	R. D
Perce, Benj. H	Mooresville	R. D
Prather, Wm. E	Mahalasville	R. 10
Paxson, J. C	Martinsville	R. D
Robinson, H. C	Martinsville	R. D
Robbins, Clark	Mooresville	R. 10
Reagan, A. W	Mooresville	R. D
Ritter, C. L	Mooresville	R. D
Seaton, Chas	Martinsville	R. D
Seaston, Graff. W	Hall	R. D
Tilford, A. S	Martinsville	R. D
Tilford, Benj. W	Martinsville	R. D
Tarlton, R. H	Martinsville	R. D
Thompson, T. L	Monrovia	R. D
Vincent, J. K	Waverly	R. 3
Vansant, Wm. P	Brooklyn	R. D
Willan, Ira C	Morgantown	R. D
Whorton, Jas. O	Waverly	R. D
Williamson, R. B	Paragon	R. D

Regular, 48; Eclectic, 2.

Noble County.

Abel, L. F	Kendallville.	R. 10
Bowker, J. J	La Otto	R. D
Broughton, F	Avilla	R. D
Buchtel, M. M	Ligonier	N. R. 10
Carr, George W	Ligonier.	R. D
Depew, E. W	Wolf Lake.	R. 10
Dunlap, Robert.	Kendallville.	E. 3
Ellis, O. J. F	Ligonier.	H. D
Forry, B. F	Wawaka.	R. D
Frank, W. N	Ligonier.	R. D
Gants, John	Cromwell	E. D
GILBERT, J. L	Kendallville	R. D
Green, Thomas C.	Albion	R. D
Green, William T	Albion	R. D
Hays, John W	Albion	R. D
Isbell, P. C	Kendallville	N. R. 10
Junkin, Samuel B	Cromwell.	N. R 10
Knepper, Ed. W	Ligonier.	R. 10
Kester, R. L	Avilla.	H. D
Maloney, F. C	Avilla.	R. D
Mitchell, W. K	Ligonier.	R. D
Moore, N. B	Merriam.	R. 10
Nifer, Frank J	Brimfield	E. D
Newton, W. E	Ligonier.	H. D
Olds, W. M. B	Kendallville	E. D
Palmeter, C.	Ligonier.	R. 10
Reiff, N. G	Albion	H. D
Roehrig, P. J	Avilla.	R. D
Ruth, Henry	Kendallville	E. 10
Salmon, John C	Green Center	R. D
Seymour, C. A	Wawaka	R. D
Shobe, W. A	Ligonier.	R. D
Schlotterback, E. L.	Ligonier	N. R. 3
Shock, H. W	Wolf Lake	N. R. 10
Strawn, E. H	Rome City.	R. D
Teal, Norman	Kendallville	R. D
Teal, George A	Kendallville	R. D
Trader, J. L	Brimfield	R. D
Tucker, H. G	Cromwell	R. 10
Williams, W. L.	Kendallville	R. D
Williams, S. T	Kendallville	E. D
Williams, Nathan	Kendallville	E. 10
Wilson, D. C	Kendallville	E. D
Woodruff, G. L	Ligonier.	E. 10
Wilson, D. C	Kendallville	E. D
Wyatt, A. R	Rome City	E. D

Regular, 26; Eclectic, 11; Homeopathic, 4; not reported, 5.

Newton County.

Name.	*Post Office.*	*School.*	*Name.*	*Post Office.*	*School.*
Beckner, J. F., Sr	Kentland	R. D	Humeston, M. L	Goodland	R. D
Caldwell, S. N	Pilot Grove	E. D	McCain, R. C	Kentland	R. D
Calvert, G. S	Mt. Airy	R. D	McClain, Jos. H		N. R. 10
Combs, M. R		R. D	Piatt, B. W		R. D
COPPOCK, ANSON	Goodland	R. D	Recher, L. H	Morocco	R. D
Hatch, J. A.	Kentland	R. D	Smith, Geo. B	Foresman	R. D

Regular, 10; Eclectic, 1; not reported, 1.

Ohio County.

Alden, Thos. E	Rising Sun	R. 3	Sullivan, Wm. H	Rising Sun	R. D
Craig, Wm. H	Rising Sun	R. 3	Stevenson, Geo. A	Rising Sun	R. D
Elfers, John	Sugar Branch	R. D	Spaulding, John	Hartford	R. D
GILLESPIE, WM	Rising Sun	R. D	Vanosdol, Jno. W	Allensville	R. D
Langsdale, Robt. G	Rising Sun	R. D	Vanosdol, Chas. S	Allensville	R. D
Miller, James B	Hartford	R. 10	Wilson, Nathan H	Guionville	N. R. 3
Rockafellow, W. A.	Guionville	E. 3			

Regular, 11; Eclectic, 1; not reported, 1.

Orange County.

Brent, Williams	Newton Stuart	R. D	Kochenour, Wm. P.	Paoli.	R. D
Boyd, Charles L	Bromer	R. D	Laughlin, E. D	Orleans	R. D
Bowles, Lewis S	Paoli.	R. 10	Lingle, R. W	Orleans	R. D
Baker, James.	Stampers Creek	R. 10	Lindley, Laban.	Paoli	R. D
Carter, Theo. P.	Orangeville	R. D	Montgomery, J. W	Valeene	R. D
Ellis, William D	Youngs Creek	R. 10	May, George W.	Orleans	R. D
Gilliatt, William B.	Youngs Creek	R. D	Ritter, John A., Jr	West Baden	R. D
Hon, Benton J	Orleans	R. D	Ritter, John A., Sr	Orangeville	R. D
HON, ULRICH H	Paoli	R. D	Ryan, Samuel	French Lick.	R. 10
Hazelwood, Geo. R	Valeene	R. D	Ritter, Thomas B.	Orangeville	R. 3
Hunt, Frank P	Leipsic	R. 10	Sherrod, Wm. F., Jr	West Baden	R. 3
Hazelwood, Green	Chambersburg	R. D	Sherrod, James H	Paoli.	R. 10
Hazelwood, Lee.	Valeene	R. D	Smith, Emanuel A	Newton Stewart.	R. 3
Hackney, William R	Orleans	R. 10	Still, Abraham C	Syria	R. D

Regular 28.

Owen County.

Bridges, A. P. W	Alaska	R. 3	Mullinnix, M. G	Spencer	E. 10
Bartholomew, N. B.	Poland	R. 3	McDonald, D. H	Quincy	R. D
Belles, J. T	Spencer	R. D	McKelvey, S. R	Patricksburg	R. D
Chamberlain, W. L	Poland	R. 3	Naanes, G. W	Arney	R. 10
Coble, Jacob	Spencer	R. D	Osgood, H. G	Gosport	E. D
Cox, N, D.	Spencer	R. D	Pierson, Allen	Spencer	R. D
Erskine, A C	Cuba	R. D	Rice, Wm. H	Cuba	R. D
Fisher, B. F	Quincy	R. D	Richards, S. D	Patricksburg	E. 10
Gantz, Thos	Freedom	E. 10	Schell, Walker	Spencer	R. D
Gilbert, W. H	Farmer's Station	R. 10	Sloan, J. N	Patricksburg	R. 3
Goss, J. M	Freedom	R. D	Smith, J. W	Gosport	R. D
Gray, O. F	White Hall	R. D	Smith, S. E	Gosport	R. D
Hamilton, J. W	Coal City	R. D	Stone, W. R	Poland	R. 10
Hester, U. A. V	Arney	R. 10	Stucky, J. M	Gosport	R. D
Hickam, W.	Freedom	R. D	Stucky, F. V	Gosport	R. D
Hixon, Wm. H	Freedom	R. 10	WILES, W. V	Spencer	R. D
Jones, J. M.	Cataract.	R. 10	Wiles, F. M.	Spencer	R. D
Livingston, J. J	White Hall	E. D	Williams, J. A	Patricksburg	R. 10
Maddox, W. B. S	Vandalia	E. 10	Wooden, J	Gosport	R. D
Medaris, S. D.	Jordan Village	E. 10	Zook, D. I	Clay City	R. D
Minich, A. J	Freedom	R. 10			

Regular, 34: Eclectic, 7.

Parke County.

Name.	Post Office.	School.
Alvord, Hiram	Rockville	H. D
Ball, James T	Judson	R. D
Black, Robert O	Mansfield	R. D
Baldridge, Robt. A	Rosedale	E. D
Boyd, James M.	Annapolis.	R. D
Bates, Aticus C.	Rockville	E. 10
Baldridge, John H	Roseville	E. D
Cross, Joseph F.	Rockville	R. D
Caplinger, Charles A.	Marshall	R. 3
Crooks, James	Bridgeton	R. D
Crooks, Jacob H	Bridgeton	N. R. 10
Crooks, William T	Bridgeton	N. R. 3
Campbell, Annie B	Rockville	E. D
Darroach, William P.	Hollandsburg	R. D
Dayly, George P	Rockville	R. D
Dare, John S	Bloomingdale.	R. 10
Deverter, George T.	Howard	R. D
Dooley, Rufus L	Atherton	N. R. 3
Goldsberry, John A	Annapolis	R. D
Gillum, William H	Rockville	R. D
Garrigus, John J.	Sylvania	R. 3
Goss, Marian	Bellmore	R. D
Hudson, Benjamin F.	Montezuma	R. D
Homes, William B	Waterman	R. 10
Hansell, David	Catlin	N. R. 10
Harrison, John C.	Montezuma	N. R. 10
Jones, Norman L.	Waterman	R. D
Johnston, Marian A	Bridgeton	R. D
Larue, Benjamin	Portland Mills	R. D
Leonard, Cerilda	Rockville	N. R. 10
McKey, Rich'd H. W.	Russell's Mills	R. 10
McCune, George W	Montezuma	R. D
McCord, Samuel H.	Judson	R. 3
Mendenhall, E. W	Sylvania	E. 10
MORRIS, CHAS. C	Rockville	R. D
Mater, Jacob D.	Bridgeton	R. D
Martin, Alonzo	Bellmore	R. D
Morris, Aaron W	Coloma	R. D
Norman, James I	Parkeville	R. D
Powell, Beecher B	Marshall	E. D
Price, William S	Catlin	R. 10
Rice, Harrison J	Rockville	R. D
Tomlinson, A. D	Bloomingdale.	R. D
Vancleave, Elijah L	Catlin	R. 3
Williamson, Wm. N	Sylvania	R. D
Williamson, Alvin A.	Russell's Mills	R. 3
Woody, George C	Annapolis	N. R. 10
Welch, John A	Lena	R. D
Webster, Reuben	Bridgeton	N. R. 10
York, Eli	Harviesburg	R. D

Regular, 35; Eclectic, 6; Homeopathic, 1; not reported, 8.

Perry County.

Adye, George F	Troy.	E. D
Allen, Thomas J	Adyeville	R. 10
Brucker, Charles M	Tell City	E. D
Bennett, J. B	Derby	R. 3
Bacon, Jesse D	Troy.	R. 10
Cassidy, Joseph	Bristow	R. 3
Cluthe, William	Tell City	R. D
Cannavan, John W.	St. Croix.	R. 3
Foster, Hiram	Foster's Ridge.	R. 10
Hawkins, E. F	Leopold	E. 10
Gabus, Peter C	Leopold	R. 3
Hendrixson, A. M. D.	Rono	R. D
Lee, John H	Rome	R. D
Ladd, C. W	Cannelton.	R. D
Lomax, William	Bristow	R. D
MITCHELL, F. A	Cannelton.	R. D
Myers, Josephus	Rono	R. D
Meeks, Lewis.	West Fork.	E. 10
Schoemer, F. W	Cannelton.	R. D
Schillhaus, F. W	Tell City	H. D
Wedding, M. F.	Rome	R. D
Webb, J. R	Troy.	R. 10
Van Winkle, S	German Ridge	E. 10

Regular, 17; Eclectic, 5; Homeopathic, 1.

Pike County.

Agee, C. J.	Stendal	R. 10
Adams, J. R	Petersburg	R. D
Beardsley, J. M	Winslow.	R. D
Bethell, W. J	Petersburg	R. 10
Byers, A. R.	Petersburg	R. D
Basinger, T. W	Oatsville	R. D
Corn, Nathaniel	Augusta.	R. 3
Coleman, J. W	Augusta.	R. 3
De Tar, David	Winslow.	R. 3
DUNCAN, J. B.	Petersburg	R. D
Daniels, D. H.	Otwell.	R. D
Furgeson, J. W	Spurgeon	R. 10
Furgeson, Thomas	Pikeville	R. 3
Fullinweider, C. H	Petersburg	R. D
Godwin, J. W.	Otwell	R. 10
Hornbrook, J. T	Union.	R. D
Harrington, A. J	Velpin.	R. 10
Hawkins, John	Petersburg	R. D
Hilsmeyer, L. H	Stendal	R. D
Harris, R. W	Delectable Hill	R. D
Ireland, G. L	Winslow.	R. D
Kinn, R. R	Petersburg	R. D
Kepley, William	Petersburg	E. 10
Lance, J. T	Spurgeon	R. 3
Leslie, A. L.	Petersburg	R. D
Link, W. H	Otwell	R. D
Osborn, W. R	Pleasantville	R. D
Palmer, E. H	Glezen.	E. 10
Pogin, Henry	Velpin	R. D
Rhoads, A. J	Pikeville	R. 10
Taylor, J. N	Velpin	R. 3
Thomas, M. C.	Petersburg	E. 10
Schenck, H. F	Oatsville.	R. D
Smith, J. T	Glezen.	R. 10
Woodard, L. E	Winslow.	R. D
Wilson, I. R	Petersburg	R. D
Ward, J. P	Union	R. D

Regulars, 34; Eclectics, 3.

Porter County.

Name.	*Post Office.*	*School.*	*Name.*	*Post Office.*	*School.*
Allen, Charlotte A	Valparaiso	R. D	LORING, D. J	Valparaiso	R. D
Atkins, Lyman	Kout	R. D	Letherman, A. P	Valparaiso	R. D
Blackstone, J. K.	Hebron	R D	Letherman, J. H	Valparaiso	R. D
Blackstone, J. K., Jr	Hebron	R. D	McCarthy, J. F.	Valparaiso	R. D
Blackstone, W. B.	Hebron	R. D	Miller, Robt. E.	Chesterton	R. D
Beer, Henry M	Valparaiso	R. D	Mullen, H. E.	Valparaiso	R. D
Cattron, W. O	Valparaiso	H. D	Marr, Delos D	Chesterton	R. D
Coates, Hays C	Valparaiso	R. D	Newland, Jas. H	Valparaiso	R. D
Carson, J. C	Valparaiso	R. D	Pratt, Samuel R	Hebron	R. D
Ellis, Henry I	Kout	E. D	Ryan, Jno. A	Valparaiso	E. D
Edwards, Enos A	Hebron	H. 3	Sayles, M. F	Valparaiso	H. 10
Green, Henry	Chesterton	R. 10	Vincent, A. W	Valparaiso	E. D
Hubbard, R. B	Hebron	E. D	Vanduzen, A. J	Kout	R. D
Jones, Erasmus	Hageman	R. 10	Wood, O. S	Hebron	E. D
Kellogg, Chas. S	Valparaiso	E. D	Yohn, Wm. A	Valparaiso	R. D
Kester, Josiah	Boon Grove	R. D			

Regular, 22; Eclectic, 6: Homeopathic, 3.

Posey County.

Brydon, John F	Griffin	R. 3	Henderson, Samuel C	St. Phillips	R. D
Bucklin, George W	New Harmony	R. D	Krausgrill, David	Wadesville	R. D
Baldwin, W. H	Olivers	R. D	McDonald, Dennis	New Harmony	R. 3
Bitz, L. B	Blairsville	R. D	Neal, Daniel	New Harmony	R. 10
Cosby, Lucien B	Cynthiana	R. 3	Pearse, Simeon H	Mt. Vernon	R. D
Cross, William	Griffin	R. 10	Powell, John W	Mt. Vernon	R. 3
Dentsdorff, Herman B	Parker's Setl'm't	R. 10	Peckingbaugh, G. W	Mt. Vernon	R. D
Dixon, R. S	West Franklin	H. 10	Ramsey, Douglas C.	Mt. Vernon	R. D
Elliott, Cyrenius, Sr	Poseyville	R. 10	Reed, John	Mt. Vernon	E. 10
Elliott, Cyrenius, Jr	Poseyville	R. 3	Rawlings, Samuel O	New Harmony	R. D
Flucks, Carl	St. Wendel	R. 10	Rutter, John	Cynthiana	E. D
Gudgel, James E	Cynthiana	R. D	Rutledge, John C	Poseyville	R. 10
Goodwin, Edward J	Solitude	R. D	Schultz, Oscar T	Mt. Vernon	R. D
Glaze, L. Alonzo	Stewartsville	R. D	Smyth, Richard	Mt. Vernon	R. D
Gregory, James C.	Farmersville	R. D	Smyth, John A.	Mt. Vernon	R. D
Gettings, Charles C.	Grafton	R. 10	Spencer, Edwin V	Mt. Vernon	R. D
Holton, William H	New Harmony	R. D	Thomas, George A	Cynthiana	R. D
Hicks, C	Caborns	R. D	Welborn, George	Stewartsville	R. D
Huston, Joseph C.	Grafton	R. D	Williams, Joseph B	Wadesville	R. 3
Harper, John	Mt. Vernon	R. D	Weever, John B	Mt. Vernon	R. D
Hensler, Ernest	West Franklin	R. 3	Young, Thomas B	Poseyville	R. D

Regular, 39; Eclectic, 2; Homeopathic, 1.

Pulaski County.

Brown, Stephen I	Francisville	R. D	Osborn, Jas	Star City	R. 10
Busk, Felix G	Oak P. O.	R. 3	Peters, R. J. D	Macy	R. 10
Freemyer, G. K.	Winamac	H. D	Pattison, H. E	Winamac	R. D
Huston, Chas. N	Pulaski	R. 3	Pugh, Jno. W.	Winamac	R. D
Hunt, Z. P	Ora	R. 10	Rannells, W. S	Monterey	R. D
Huey, Robert B	Buffalo	R. D	Robinson, F. B	Monticello	E. D
Hovions, R. D	Francisville	R. D	Sharrer, J. C	Francisville	R. D
Kittinger, H	Winamac	R. D	Stephens, Oliver J	Medaryville	R. 10
Kelsey, Wm. D.	Monterey	R. D	Stephens, H. C	Winamac	R. D
Kidd, W. J	Medaryville	E. D	Thompson, G. W	Winamac	R. D
McCandless, A. S.	Medaryville	R. D	Thomas, F. B.	Winamac	R. —
Mattingly, Robert	Francisville	R. 10	THOMAS, J. J	Winamac	R. 10
McPherson, Chas. F	Pulaski	R. D	Thompson, W. H	Winamac	R. D
Mass, D. F	Winamac	R. D	Whight, W. G.	Winamac	R. 10

Regular, 25; Eclectic, 2; Homeopathic, 1.

Putnam County.

Name.	*Post Office.*	*School.*
Allen, Chas. A	New Maysville	R. 3
BENCE, G. W	Greencastle	R. D
Baird, Joshua W	Russelville	R. 18
Batman, W. F	Roachdale	R. D
Cully, J. F	Bainbridge	R. D
Cross, J. B	Bainbridge	R. D
DeVore, H. V.	Greencastle	R. D
Evans, E. B	Greencastle	R. D
Fordice, J. H.	Russelville	R. D
Fisher, Samuel	Greencastle	R. D
Farver, G. W	Bainbridge	R. D
Grimes, J. B	Mt. Meridian	R. 14
Hanna, L. M	Greencastle	R. D
Hopwood, W. C	Greencastle	R. D
Harris, W. C	Carpentersville	R. D
Hill, W. D	Greencastle	H. 10
Horn, Amos H	Putnamville	R. D
Hawkins, Eugene	Belle Union	R. D
Hamilton, R. S	Portland Mills	R. 40
Harvey, J. W	Russelville	R. 10
Knight, J. M	Greencastle	E. D
Leatherman, J. R	Manhattan	R. D
Layman, D. W	Putnamville	R. 10
Larue, Benjamin	Portland Mills	R. D
Morrison, J. F	Greencastle	R. D
Mullinix P	Cloverdale.	R. 3
Milligan, Thos. F.	Roachdale.	R. 4
Morrow, L. B	Greencastle	R. D
McCarty, W. T	Bainbridge	R. D
McNutt, G. T.	Putnamville	R. D
Newgent, R. P	Morton	R. 30
Prichard, W. K.	Cloverdale	R. D
Pitchlynn, H. R	Greencastle	R. 10
Preston, J L	Cloverdale	R. D
Preston, Abe L	Fillmore	R. D
Preston, A. G.	Greencastle	R. D
Purcell, W. M	Reelsville	R. D
Prichard, Louis.	Cloverdale	E. D
Robinson, Josiah B.	Fillmore	R. D
Rogers, H. C	Barnard.	R. D
Smythe, G. C	Greencastle	R. D
Stockwell, G. W	Reelsville	R. D
Stanley, Logan.	Fincastle	R. D
Stallard, J. J	Russelville	R. 10
Slavens, John	Brick Chapel	R. D
Taylor, Mary J.	Greencastle	H. D
Tinsley, B. A	Russelville	R. 3
Taylor, G. W	Greencastle	H. 30
Walker, W. O.	Fillmore	R. D
Wood, Noah S	Groveland.	R. D

Regular, 45; Eclectic, 2: Homeopathic, 3.

Randolph County.

Alexander, R. P	Winchester	P.-M. 10
Alexander, Mrs. P. B.	Winchester	P.-M. 10
Bailey, E. T.	Ridgeville.	R. D
Berry, J. S	Spartanburg	R. D
Bosworth, R	Winchester	R. D
Blair, J. S	Lynn	R. D
Botkin, J. W	Unionport	E. 10
Botkin, Thos. W	Unionport.	E. 3
Baldwin, G. C	Bloomingport.	R. 3
Bruce, G. W	Winchester	R. 10
Ballard, A. B.	Deerfield	R. D
Carver, J. M	Winchester	R. 10
CHENOWITH, J. T	Winchester	R. D
Chenowith, F. A	Winchester	R. D
Chenowith, N. T	Windsor.	R. D
Commons, Wm	Union City	R. D
Conti, J. L	Deerfield	R. D
Carter, D. M	Modoc.	R. D
Cox, Cyrus	Lynn	R. D
Davis, L. N	Farmland	R. D
Evens, C. S	Union City	R. D
Evens, J. J	Winchester	R. 10
Evens, G. S	Saratoga	R. 10
Franks, H. P	Losantville	R. D
Fredrich, G. W	Ridgeville.	R. D
Farquhar, A. H.	Ridgeville.	R. D
Gustin, ——	Union City	H. D
Heiner, John	Arba	R. D
Hiatt, J. A	Ridgeville.	E. D
Hetzler, W. W	Union City	R. D
Harrison, H.	Union City	R. D
Huddleston, A. F.	Winchester	H. D
Hammon, E. W.	Spartanburg	E. 3
Hunt, H. C	Trenton	R. 3
Hunt, P.	Farmland	E. 10
Hamilton, R	Lynn	R. 10
King, J. V	Castle	R. 10
Keener, J. M	Farmland	R. 10
Kendall, J. P	Losantville	R. 10
McFarland, N	New Pittsburg.	E. 10
Marquis, Wm.	Bartonia	E. 10
Meek, Jos.	Arba.	R. 10
Martin, J. C	Union City	R. D
Markle, J. E	Winchester	R. D
Nixon, John	Farmland.	R. D
Owen, J. K	Harrisville	R. 3
Purcell, John.	Union City	R. D
Proctor, J. A	Union City.	P.-M. 10
Ruby, S. B	Union City	R. 3
Remmel, Mrs. S	Winchester	P.-M. 10
Rynard, G	Union City	R. D
Rodgers, A. G	Parker	R. D
Rickard, W. A	New Pittsburg	E. D
Rickard, Mrs. C. A	New Pittsburg	E. —
Reeves, J. L	Union City	E. D
Smith, W. G	Winchester	R. D
Smith, C	Farmland	E. D
Shoemaker, W. J	Ridgeville.	R. 10
Tisor, Wm. R	Rural	R. 10
Thompson, Val.	Union City	E. 10
Trent, I. N	Losantville	R. D
Thompson, G. W	Union City	E. D
White, Jas. K.	Modoc.	R. D
White, L. E.	Spartanburg.	P.-M. D
Yockey, D. H	Harrisville	R. 3
Yergin, H. H	Union City	R. D

Regular, 46; Eclectic, 13; Homeopathic, 2; Physio-Medical, 5.

Ripley County.

Name.	*Post Office.*	*School.*	*Name.*	*Post Office.*	*School.*
ANDERSON, JAS	Versailles	R. D	Jones, John G	Versailles	R. D
Abbott, June	Milan	E. D	Jerman, L. W. D	Ballstown	R. D
Abbott, Mano	Milan	E. D	Lamb, James F.	Cross Plains.	E. D
Brown, Charles M	New Marion.	R. D	Miller, R. H	Cross Plains.	R. D
Brenton, John T	Osgood	R. D	Olmsted, Russel T	Rexville.	R. D
Davis, James R.	Morris.	R. D	Newforth, Christian	Sunman.	R. D
Cass, Chester H.	Holton	R. D	Parson, George E.	Rei	E. D
Carey, Charles H.	Friendship	R. 3	Schloper, George F.	Sunman	N. R. 10
Clark, Freeman	Rei	R. D	Sweezey, John M.	Cross Plains.	N. R 10
Freeman, Edward	Osgood	R. D	Rodgers, E. D	Milan	R. 3
Firsich, Michael	Batesville	N. R. 10	Miller, A. G	Elrod	E. D
Freeland, John P	Sunman	R. D	Roberts, Jeremiah	Holton	R. 3
Givans, Sanford E	Elrod	R. 3	Robinson, John M	Versailles	R. D
Hicks, John C	Napoleon	P.-M. D	Redlon, Daniel M	Pierceville	R. 3
Hess, John N.	New Marion.	R. D	Townsend, S. B.	Napoleon	R. D
Holbert, Wm. M	Elrod	R. D	Vincent, E. B.	Sunman.	R. D
Joseph, Alexander F	Napoleon	R. D	Ziteke, Joseph	Napoleon	R. D

Regular, 25; Eclectic, 5; Physio-Medical, 1; not reported, 3.

Rush County.

Axline, J. B	Raleigh	R. D	McGaughey, Jno. E	Arlington	R. D
Arnold, John.	Rushville	R. 10	McMahan, Samuel W	Rushville	R. D
Arnold, Wm. W	Rushville	R. 3	McGee, Amer	Rushville	R. D
Beher, Ed. D	Rushville	E. D	Newlin, S. C	New Salem	R. D
Bruner, Mary L	Carthage	R. D	Newby, Oliver	Carthage	R. D
Bogart, H. J.	Carthage	R. 10	Orr, Jas. P	Glenwood	R. D
Drake, Flavins J	Carthage	N. R. D	Powell, Elmer W	Sexton	R. D
Elliott, H. M	Glenwood	3	PUGH, WM. A	Rushville	R. D
Gilbert, Chas. H	Rushville	H. D	Parsons, Chas. H	Rushville	R. D
Green, Jas. W	Arlington	R. D	Ross, L. G	Raleigh	R. 10
Green, Jas. C	Arlington	R. D	Rogers, Wm. R	Milroy.	E. 3
Green, Lat	Occident	R. D	Redding, Jacob	Carthage	P.-M. D
Graham, A. E	Richland	R. 10	Rucker, Thos. H	Arlington	R. 10
Hubbard, Wm. H	Manilla	E. D	Riley, S. H	Milroy	E. D
Hackleman, F. G.	Rushville	R. D	Sexton, Marshall.	Rushville	R. D
Hargrove, W. S	New Salem	R. D	Sexton, Jno. C	Rushville	R. D
Inlow, Jno. J.	Manilla	R. 10	Smith, Wm. H	Rushville	R. D
Irvin, John F	Falmouth	R. D.	Sparks, Jas. B	Carthage	R. D
Johnston, WM. A	Raleigh	E. D	Spurrier, J. H	Rushville	R. D
King, Frank B	Homer	R. D	Tevis, Jas. L. W. L	Moscow	R. 10
Leech, E. W	Manilla	10	Thomas, Samuel C	Milroy	R. D
Moffett, John.	Rushville	R. D	Welliver, Jas. E	Rushville	H. D
Megee, Wm. N	Occident	R. D	Wright, George.	Sexton	P.-M. D

Regular, 23; Eclectic, 5; Homeopathic, 2; Physio-Medical, 2.

Shelby County.

Adams, J. M	Noah	R. 10	Lucas, J. N.	Shelbyville	H. D
Baylor, W. K	Waldron	E. D	McCain, T. J	Shelbyville	R. D
Bowlby, J. B	Noah	R. D	McFadden, G. W.	Shelbyville	R. D
Comstock, J. A	Marrietta	R. D	Maddox, J. F.	Shelbyville	E. D
Comstock, H	Smithland	R. D	Perry, John	Shelbyville	R. D
Connelly, H. M.	Flat Rock	R. D	Parrish, J. W	Shelbyville	E. D
Crippen, E. H	Blue Ridge	R. 10	Pierson, W. M	Fountaintown	R. D
Drake, I. H.	Shelbyville	R. D	Raynes, R. D.	Lewis Creek	R. 10
DRAKE, MORIS	Shelbyville	R. D	Robbins, J. P	Shelbyville	R. D
Floyd, R. M	Shelbyville	R. 10	Rubush, T. R.	London	R. D
Ford, W. M.	Mt. Auburn	R. D	Salisbury, S. S	Morristown	E. 10
Fleming, G. W	Shelbyville	R. D	Snider, J. W	Fairland	R. D
Green, W. F	Shelbyville	R. D	Stewart, J. K	Fairland	R. D
Gordon, W. B	Manilla	R. 3	Smith, H	Smithland	R. 10
Gilmore, M. R	Boggstown	R. D	Strickler, S. L	Boggstown	E. D
Inlow, I. W.	Blue Ridge	R. 10	Taylor, J. F	Sulphur Hill	R. D
Inlow, J. E.	Shelbyville	R. 10	Trees, I. W	Smithland	R. D
Jenkins, J. R.	Waldron	R. D	Washburn, R. R	Waldron	R. 10
Jones, T. S	Flat Rock	R. D	Winters, G. G	Shelbyville	H. 10
Kennedy, S. A	Winterroud	R. 10	Whetzel, F. F	Morristown	R. D
Kennedy, S. A	Shelbyville	R. D	Wolf, J. G	Morristown	R. D
Kennedy, T. C	Shelbyville	R. D	Wray, Hardy	London	E. 10
Keeling, W. W	Sulphur Hill	E. D	Dickman, F	Shelbyville	E. 10
Knapp, W. T	Shelbyville	H. D	Moore, J. P	Manilla	N. R. 10
Larimore, J. M	Carrolton	R. D	Coleman, Emma E	Shelbyville	E. D

Regular, 37; Eclectic, 9; Homeopathic, 2; not reported, 1.

Spencer County.

Name.	*Post Office.*	*School.*	*Name.*	*Post Office.*	*School.*
Ambrose, H. L	Rockport	R. D	Jolly, J. C	Lake	R. D
Austin, T. R	Chrisney	E. D	Johnson, T. J.	Dale	R. D
Anderson, E. M.	Huff	R. D	Johnston, E. L	Oakland	R D
Bean, A. M	Newtonville	E. D	James, J. B.	Buffaloville	E. 10
Bryant, J. B	Gentryville	R. 3	Johnson, L. B. W.	Chrisney	R. D
Bryant, W. S	Dale	R. D	Killian, J. L	Eureka	R. 10
Bryant, J. H	Gentryville	R. 10	Lucas, L. B	Kercheval	E. D
Billart, F. W	Chrisney	R. 10	Lang, J. W	Rockport	R. 10
Butler, J. M	Huff	E. D	Littlepage, S. B.	Rockport	R. D
Camp, W. F.	Buffaloville	E. 3	McKasson, J. W	Gentryville	E. 10
Currey, H. M	Newtonville	R. D	Milner, I. L.	Rockport	R. D
Dailey, J. M	Rockport	R. D	Medcalf, A. F.	Dale	R. 10
Dyer, A. S	Huffman	E. 3	McCoy, L. H	Lake	R. D
Ehrman, E. D	Rockport	H. D	Myler, J. M.	Eureka	R. D
Gengelbach, E. E.	St. Meinrad	E. D	Malowskey, Felix	Maria Hill	R. D
HACKLEMAN, F. M	Rockport	E. D	McCoy, G. W	Chrisney	R. D
Hermanni, W. A	Fulda	H. 10	Reinhard, E. W	Dale	R. D
Harrison, E. P	Patronville	E. 10	Schweitzer, J. J	Santa Claus	R. 3
Hartley, H. H	Eureka	R. D	Turpin, James	Rockport	E. D
Hammond, D. M	Grandview	R. D	White, Arthur	Rockport	R. D
Hunter, S. W	Rockport	R. 3	Worseley, George	Grandview	R. D
Harrison, J. A	Pigeon	R. 10	Wright, Thomas	Midway	R. D
John, B B	Newtonville	E. 10	Williams, W. H	Gentryville	E. 3
Jones, W. M	Gentryville	R. D	White, J. T	Grandview	R. 3

Regular, 32; Eclectic, 14; Homeopathic, 2.

Scott County.

Blocher, J. B	Holman	R. D	Paswater, Jno. G	Lexington	R. D
Casey, Jno	Austin	R. D	Rogers, Lion M	Austin	E. 3
Green, J. W	Lexington	E. D	Sawer, Jno A.	New Frankfort	R. D
Houghland, M. E	Vienna	R. 3	Smith, M. W	Scottsburg	R. D
Moser, Jno. S	Vienna	R. 10	Watson, Jno. M	Scottsburg	R. D
NICKLES, J. M	Scottsburg	R. D			

Regular, 9; Eclectic, 2.

Starke County.

Abner, John R	Knox	P.-M. D	Dunfee, Joseph	Knox	P.-M. D
Bonar, S. S	Knox	R. 10	Glazebrook, L. D.	San Pierre	R. 10
Bonar, M. C	Knox	R. 3	Henderson, A. H	Knox	E. 10
Conner, L. E.	Knox	E. 10	Hunt, Z. P	Ora	E. 10

Regular, 3; Eclectic, 3; Physio-Medical, 2.

St. Joseph County.

Applegate, C. H	South Bend	R. D	Manchester, H	South Bend	H. D
Arlington, J. W	Walkerton	R. D	Maurer, Jno	South Bend	N. R. 10
Borough, Jno	Mishawaka	H. D	Moore, C. W	Walkerton	R. D
Brown, J. R	Sumption Pr'rie	R. 10	Miller, Martin	New Carlisle	H. D
Butterworth, W. W	Mishawaka	R. D	Miller, Allen G	South Bend	N. R. 3
Campbell, A. S	North Liberty	N. R. 10	Massey, T. F	New Carlisle	E. D
Cassidy, Jno	South Bend	R. D	McDonald, T. T	New Carlisle	R. 10
Carpender, G. W	South Bend	R. D	Merritt, A. B	South Bend	N. R. 10
Church, I. W	Walkerton	N. R. D	McGill, Jno. A	South Bend	H. D
Dunning, L.	South Bend	R. D	McAlister, E. W	South Bend	R. D
Daugherty, C. A	South Bend	R. D	Morton, D. H.	Mishawaka	N. R. 10
Drollinger, E. M	South Bend	E. D	Pierce, Wm. A	Osceola	R. 10
Davis, J. H	New Carlisle	R. D	Partridge, J. M.	South Bend	H. D
Dayton, Danl.	South Bend	R. D	Rupp, P. E	South Bend	R. 10
Endley, J. F	Walkerton	E. D	Richmond, C. M	Walkerton	R. D
Fast, Emmet E	Lakeville	R. D	Sawyer, F. M.	South Bend	R. D
Fink, Henry A	Woodland	R. 3	Sack, J. C.	South Bend	R. D
Green, Jas. B.	Mishawaka	E. 10	Stockwell, Sarah	South Bend	R. D
Grimes, J. F	Mishawaka	E. 10	Shuey, Geo. E	Mishawaka	R. D
HITCHCOCK, W. W.	South Bend	R. D	Slominski, —	South Bend	H. D
Huntsinger, A	Mishawaka	E. D	Shaefer, G. J	North Liberty	E. 10
Harris, Robt	South Bend	R. 10	Szymanski, F.	South Bend	R. D
Harris, Joel	New Carlisle	E. 10	Thorpe, Baron C	Mishawaka	R. D
Kilmer, S. L	South Bend	R. D	Varier, Jas. A	North Liberty	R. D
Kettring, J. A	South Bend	R. D	Van Pelt, Ryan T.	Mishawaka	R. D
Myers, C. H.	South Bend	H. D	Van Riper, A. N	New Carlisle	R. D
Montgomery, H	South Bend	R. D	Wickham, W. A R	South Bend	E. D
Moore, Jno	Lakeville	R. 10	Woodworth, H. A	Walkerton	R. 3
Moore, Robt	Lakeville	R. 10			

Regular, 35; Eclectic, 9; Homeopathic, 7; not reported, 6.

Steuben County.

Name.	*Post Office.*	*School.*
Abbott, Lyman	Fremont	R. D
Bowin, M. M	Flint	R. D
Brown, D. N. E.	Hamilton	R. 10
Beiz, F. E.	Pleasant Lake.	R. D
Bolin, M. J	Butler	N. R. 10
Beveir, Wm.	Waterloo	E. D
Brown, Anson.		R D
Byall, H. M.	Metz	R. D
Cameron, J. F	Hamilton	R. D
Fuller, S. H.	Pleasant Lake.	R. D
Fenton, D. W.	Roy	R. D
Firestone, John L	Salem Center	R. D
Goodale, C. W	Metz	R. D
Hoyety, J. L	Fremont	R. D
Hamilton, French C	Hudson	R. 3
Keeslar, George	Orland.	R. 10
Kimsey, J M	Salem Center	R. 10
Lease, E. R	Angola	H. 3
Morrison, T. Roy	Hudson	R. D
Moore, John H	Angola	E. 10
McNab, Theodore	Fremont.	R. D
Rausbury, M. V	Pleasant Lake.	R. D
Shaw, M. F	Angola	R. D
Simmons, E. B	Fremont.	R. D
Sanburn, P. P	Fremont.	H. D
Syder, F	Counna	R. D
Scofield, Samuel	Hamilton	R. 10
Shepherd, Z. W.	Waterloo	H. D
Taylor, E. A	York Center.	R. D
Thomas, Samuel	Orland.	E. D
WOOD, H. D	Angola	R. D
Weicht, Wm. H.	Angola	H. 10
Waller, W. H.	Angola	R. D
Williams, T. B	Angola	R. D
Wilkinson, J. J	Orland,	R. 10
Wood, T. F	Metz	R. D
Wood, Sol. A	Angola	R. D
Wallace, J. F.	Orland	R. D

Regular, 31; Eclectic, 3; Homeopathic, 4; not reported, 1.

Sullivan County.

Briggs, C. F.	Sullivan.	R. D
Bedwell, T S		R. D
Buskirk, J. S	Shellburn	R. 10
Bennett, J. H.	Farmersburg	E. D
Brown, N. S.	Buell	R. 10
Crowly, J. B	Sullivan.	E. D
Crowder, R. H	Sullivan.	R. D
Cavins, R. W	Sullivan.	R. D
Cushman, A	Graysville.	R. D
Denison, E. D	Carlisle	R. 10
Durham, J. L.	Graysville.	R. D
Delashmutt, V. E	Shellburn	R. D
Dailey, T. L	Paxton	R. 3
Freeman, J	Sullivan.	R. D
Flemming, W. A	Pleasantville	R. 3
Harper, J. A	Merom	R. 3
Harper, H. F	Merom.	R. D
Higbee. J. L	Sullivan.	H. D
HIGBEE, G. W	Sullivan.	R. D
Harper, J. B	Shellburn	R. 10
Jenkins, R. L.	Carlisle	R. 3
Lowder, C. M.	Dugger	R. D
Mayfield, T. B	Pleasantville	R. D
Mathews, J. M	Carlisle	R. D
Murphy, A. M	Sullivan.	R. D
Murphy, J. S	Sullivan.	R. 3
Murphy, A. D.	Sullivan.	R. 3
Mason, T. A	New Lebanon	R. D
McDowell, J	Pleasantville	R. 10
Nebergall, J. W	Burchard	R. 10
Osborn, S. D	Shellburn	R. D
Plew, G. F	Pittsburg	R. D
Phillips, J. L	Sullivan.	R. 3
Peyton, H. H	Paxton	E. D
Robbins, W. M	Sullivan.	R. D
Sharpless, M. F.	Sullivan.	R. D
Saunders, J. F	Sullivan.	R. 3
Sharpless, H	Fairbanks.	R. D
Stone, W. O.	Fairbanks.	R. D
Thralls, R. T	Pittsburg	R. D
Thompson, J. J.	Sullivan.	R. 3
Troxell, S. P	Paxton	H. D
VanCleve, R. H		R. D
Wier, S. D	Sullivan	R. D
Walters, J. A	Paxton	R. D
Whalen, R. M	Carlisle	R. 10
Young, J. N	Carlisle	R. D

Regular, 42; Eclectic, 3; Homeopathic, 2.

Switzerland County.

Cheever, E. M	Quercus Grove	R. 10
CRAIG, ALBERT G	Vevay	R. D
Culbertson, Scott	Moorefield	R. D
Elfers, John	Sugar Branch	R. D
Freeman, Wm	Vevay	R. D
Griffith, A. J	Mt. Sterling	R. D
Griffith, T. J	Vevay	R. D
Hewett, G. W	Vevay	R. D
Haydon, D. W.	Mt. Sterling	R. D
Jameson, J. A	Patriot	R. D
Langsdale, J. M. W	Florence	R. D
McMillen, Wm	Sugar Branch	R. 10
Olcott, W. S	Patriot	R. D
Ross, J. C.	Markland	R. D
Sage, P. S	Vevay	R. 3
Shadday, J. H.	Vevay	R. D
Simpson, R. G	Bennington	R. D
Smith, J. W	Vevay	H. D
Vanosdal, C. L	Allensville	R. D
Vanosdal, J. W	Allensville	R. D
Vanpelt, G. W	Moorefield	R. D
Woollen, L. J	Vevay	R. D

Regular, 21; Homeopathic, 1.

Tipton County.

Name.	*Post Office.*	*School.*
Armfield, Tilmon O.	New Lancaster	R. D
Austin, Winsor	Windfall	R. 10
Baldwin, Mahlon F.	Kempton	E. D
Batman, F. M	Tipton.	R. D
Collins, Geo. M.	Tipton.	R. D
Cooper, John	Groomsville	R. D
Doan, Nathan W.	New Lancaster	R. 10
Dickey, Andrew S	Tipton.	R. D
Guy, Mary L	Tipton.	R. D
Grove, Jasper M	Tipton.	R. 10
Gossett, James M	Normanda.	R. 10
Heath, Wm. N	Sharpsville	R. 3
Hilldrup, Jefferson R	Windfall	R. D
Jessup, John T.	Curtisville.	R. D
Lindsay, Jas. P.	Sharpsville	R. 10
McAlister, Lewis.	Windfall	R. 10
Newcomer, M. V. B.	Tipton.	R. D
Pitzer, A. B.	Tipton.	R. D
Repp, Geo. R.	Goldsmith.	R. 3
Rubush, D. P	Sharpsville	R. 3
Stephenson, Jos. A	Kempton	R. 3
Spitzmesser, John L	Windfall	N R. 10
Van Nuys, Wm.	Tipton.	R. D
Vickrey, A. M	Tipton	R. D
VICKREY, M. V. B	Tipton.	R. D
Wood, Geo. C.	Windfall	R. D
Zeek, Farlow S	Windfall	R. 10

Regular, 25; Eclectic, 1; not reported, 1.

Tippecanoe County.

Anderson, Joseph H	Colburn	R. D
Ackerman, August C.	Lafayette	H. D
Boyd, Benjamin H	Lafayette	R. D
Beasly, George F	Lafayette	R. D
Burns, George W.	Lafayette	E. 10
Baugh, Samuel L.	Farmers' Instit	R. D
Brown, William W. C.	Buck Creek	R. 10
Baker, Joseph H	Stockwell	R. D
Baker, Moses	Stockwell	R. D
Bales, Samuel L	Colburn	R. D
Brown, L. L		N. R. 10
Black, Dayton R	Montgomery Co	R. D
Burk, U. A	Lafayette	N. R. D
Charter, John H	Pettit	R. D
Campbell, William S		N. R. D
Crain, Charles H	Lafayette	R. D
Crider, George W.	Buck Creek	R. D
Crouse, J. H	Dayton	R. D
Charles, Robert E	West Point	R. 10
Dunhart, Michael	Lafayette	N. R. 10
Dunbar, James.	BattleGround	N. R. 10
Ellsworth, James.	Glenn Hall	R. 10
Ellis, James D	Battle Ground	R. D
Fox, S. R.	Lafayette	N. R. 10
Fickle, James M	Stockwell	E. D
Fox, Roderick U	Lafayette	N. R. D
Fifield, Alice Pierce	Lafayette	H. 10
Goldsberry, Strader S	Montmorency	R. D
George, James A.		N. R. D
Heepe, Carl.	Lafayette	R. D
Hecker, Lemuel F	Lafayette	E. D
Hunt, Cyrus E	Odell.	N. R. D
Harbaugh, C. A.	Octagon	N. R. D
Hill, William K	Dayton	R. D
Irwin, Luther M	Lafayette	R. D
Ingersoll, Benjamin F	Lafayette	R. D
Ingersoll, Joel M.	Lafayette	R. D
Keiper, Christian B.	Lafayette	N. R. D
Kirkpatrick, Geo. W	Lafayette	R. 10
Keller, M. E	Lafayette	H. D
Kelley, D. M		N. R. D
Laburn, William.	Clark's Hill	R. 10
Moffett, William R.	Lafayette	R. D
McKinsey, William	Octagon	N. R. 10
Orth, William M	Lafayette	R. D
Ogborn, Job	Buck Creek	N. R. 10
Osborn, George A	Lafayette	R. D
O'Ferrall, R. M.	Lafayette	R. D
O'Ferrall, Frank F.	Lafayette	R. D
Potel, Christian	Lafayette	R. D
Perkins, Elim E	Lafayette	E. D
Paul, Philip D		N. R. D
Pyke, Albert D	Romney	R. D
Powers, Edwin D.	Romney	R. D
Rose, Fulden W	Lafayette	N. R. 10
Rainey, Harvey Ward	Lafayette	R. D
Rush, Moses A	Lafayette	R. D
Riddle, Hiram D	Battle Ground.	R. 10
Snyder, Leander	Lafayette	R. 10
Snow, William D.	Lafayette	N. R. 10
Seawright, Samuel R.	Lafayette	R. D
Spalding, Joseph	Lafayette	R. D
Stallard, John S	Monitor	R. 3
Smith, John W.	Lafayette	H. D
Shill, C. W	Lafayette	R. D
Simison, John F	Romney.	R. D
Simison, John	Romney.	R. 10
Simpkins, J. C		N. R. 3
Vinnedge, W. W	Lafayette	R. D
WALKER, WM. S	Lafayette	R. D
Wetheral, Richard B.	Lafayette	R. D
Webster, John C	Lafayette	R. D
Washburn, George W	Lafayette	E. 10
Wilgers, Albert.	Dayton	R. D
Washburn, Oliver	Odell	R. D
Wall, John F.	Clark's Hill	E. D
Yount, Silas T	Lafayette	R. D
Yager, J. William	Glen Hall	N. R. D
Yeakle, David T.	Lafayette	R. D

Regular, 50; Eclectic, 6; Homeopathic, 4; not reported, 19.

Union County.

Bearks, D.	Liberty	E. 10
Edsell, H. P	Billingsville.	E. 3
Fosdick, Albert	Liberty	R. 10
Hastings, Z. B	Billingsville	R. D
Hutchinson, D. B	Liberty	R. 10
Kell, S. D.	Liberty	R. 10
Morris, J. E.	Liberty	R. D
Moore, H. H	Liberty	R. D
Pigman, G	Liberty	R. D
Seiglar, G. H	Liberty	R. D
Shriner, W. W	Liberty	E. 10
Smith, J. A.	Brownsville	R. 10
THOMPSON, E. C	Liberty	H. D
Williams, O. N	Lotus	H. 10

Regular, 9; Eclectic, 3; Homeopathic, 2.

Vanderburgh County.

Name.	*Post Office.*	*School.*
Armistead, Richard A	Evansville	R. 10
Ashford, Henry S.	Evansville	R. D
Allen, L. R	Evansville	E. 3
Achilles, F. W	Evansville	R. D
Artelt, Paul.	Evansville	R. 3
Bennett, Alfred T	Evansville	R. D
Brese, Louis D	Evansville	R. D
Bryan, A. H	Evansville	R. D
Babcock, Wm. D	Evansville	R. D
Begley, Baxter W	Evansville	R. D
Blount, Joseph F	Evansville	N. R. 10
Binkley, John F	Evansville	R. D
Bartenwerfer, O. A	Evansville	N. R. 3
Bray, Madison T	Evansville	R. D
Caldwell, Matilda	Evansville	N. R. 10
Compton, John W	Evansville	R. D
Couden, W. C.	Evansville	H. D
Compton, Fred. S.	Evansville	R. D
Corlew, Rufus M	Evansville	R. D
Carter, E. S.	Evansville	R. D
Dow, John L.	Evansville	R. D
Day, B. J	Evansville	R. D
Davidson, Wm. R	Evansville	R. D
Davis, F. L	Evansville	H. D
Dixon, Henry T	Evansville	R. D
Fritsch, Wm. A.	Evansville	R. D
Failing, Walter.	Evansville	R. 10
Fritsch, Louis	Evansville	R. 10
Gumberts, Simon.	Evansville	N. R. 10
Gardner, T. S.	Evansville	R. D
Gilbert, George	Evansville	N. R. 10
Green, Willis S	Evansville	R. 3
Gramm, William	Evansville	R. D
Hayden, A. M	Evansville	R. D
Herr, L. S.	Evansville	E. D
Hayhurst, A. S	Evansville	N. R. 10
Haynes, A. C	Evansville	R. D
Hazen, Alonzo T	Evansville	R. D
Hartloff, Richard	Evansville	R. D
Hodson, George	Evansville	R. D
Hooker, H. H	Oakdam	R. 10
Illing, Aug. F	Evansville	N. R. 10
Kerth, Jacob H	Evansville	R. D
Laval, Wm. J.	Evansville	R. D
Laval, John	Evansville	N. R. 10
McMahon, C. A.	Evansville	R. D
Minton, John C	McCutchanville	R. D
Muhlhausen, Mathias	Evansville	R. D
McClarkin, Jos. C	Evansville	R. D
McCoy, P. Y	Evansville	R. D
Monteaux, C. G. R	Evansville	R. D
Macer, Thomas	Evansville	E. D
Knapp, Chas	Evansville	R. D
Kneel, W. D	Evansville	R. D
Owen, John E	Evansville	R. D
Owen, A. M.	Evansville	R. D
Pollard, Wm. L.	Evansville	R. D
Pirnat, Johannes	Evansville	R. D
Pennington, J. J	Evansville	R. D
Ruark, S	Evansville	R. D
Ralston, Wm. G	Evansville	R. D
Rucker, Thos. H	Evansville	R. D
Spencer, Ethan	Evansville	R. 10
Schuyler, P. L	Evansville	R. D
Suiter, Wilhelmina.	Evansville	N. R. 10
Simons, Phillip H.	Evansville	R. D
Schultz, Theo.	Evansville	H. 10
Stone, T. W.	Evansville	R. D
Sherman, Henry M.	Evansville	E. D
Taylor, T. H	Evansville	H. D
Tapp, Wm. T.	Evansville	E. 3
Tilman, Monroe	Evansville	R. 10
Tyrrill, C. C.	Evansville	H. D
WALKER, G. B	Evansville	R. D
Williams, Floyd	Evansville	R. D
Wilton, Isaiah	Evansville	R. D
Walker, Edwin	Evansville	R. D
Witting, Anthony P	Evansville	R. D
Weber, Wm.	Evansville	N. R. 10
Warsham, Judson	Evansville	R. D
Young, G. M	Evansville	R. D
Yates, George W	Evansville	N. R. 10

Regular, 61; Eclectic, 5; Homeopathic, 5; not reported, 11.

Vermillion County.

Barnes, J. A	Gessie	R. D
Bogart, J. H	Clinton	R. D
Depuy, A. H	Dana	E. D
Ealon, H. C.	Toronto	N. R. 10
Flaugher, E. A	Eugene	R. D
HALL, M. L.	Newport	R. D
Henderson, Jas. T	Perrysville	R. D
Hall, W. I	Gessie	R. D
Harrison, J. C	Montezuma	N. R. 10
Johnson, D. B.	Perrysville	N. R. 10
James, H. H	St. Bernice	N. R 10
Keys, Otis M	Dana	R. D
Kinderman, Alex	Engene	R. D
Lonnsdale, T. N	St. Bernice	R. D
Mack, Erastus	Hillsdale	N. R. 10
McNeill, Geo. H	Perrysville	N. R. 10
McMeen, Jas	Eugene	N. R. 10
Nebeker, Henry	Clinton	R. D
Newton, G. O	Toronto.	R. D
Shepard, Lewis	Newport	R. D
Shepard, Hiram	Dana	R. D
Spottswood, E. T	Perrysville	R. D
Walkins, H. T	St. Bernice	H. D
White, C. M	Clinton	R. D
Webb, Jas. B	Perrysville	N. R. 10
Wallace, Jas.	Newport	R. D

Regular, 16; Eclectic, 1; Homeopathic, 1; not reported, 8.

Vigo County.

Armstrong, Wm. P	Terre Haute	R. D
Askren, Cort H	Terre Haute.	R. D
Brunker, James N	Riley	R. D
Baldridge, John H	Terre Haute	E. D
Ball, Lawrence S.	Prairieton	E. D
Bennett, Stephen M	New Goshen.	E. D
Brown, Theodore F	Sandford	R. 10
Belt, Richard.	Sandford	R. 3
Bates, Christopher C.	Terre Haute	R. D
Crawley, Thos. N.	Terre Haute	R. D
CRAPO, JNO. R	Terre Haute	R. D
Crapo, Geo. W	Terre Haute	R. D
Collings, Wm. O	Pimento.	R. D
Carson, Lewis E	Prairieton.	R. D
Caldwell, Henry H	Terre Haute	R. 10
Casto, Jabez C	Terre Haute	R. D
Cole, Willis H	Terre Haute	R. D
Dooley, Rufus L	Atherton	R. 3
Dolson, James B	Pimento.	R. 10
DePuy, Abraham H	Terre Haute.	E. D

Vigo County—Continued.

Name.	*Post Office.*	*School.*
Drake, Thos. G	Prairieton	R. D
Elder, W. R	Terre Haute	H. D
Eichelberger, W. C	Terre Haute	R. D
Forsythe, Mary	Terre Haute	R. D
Ferris, Edmond	Terre Haute	R. D
Foulston, Saml. W	Terre Haute	R. 3
Gerstmeyer, Chas. P	Terre Haute	R. D
Glover, Elmer E	Terre Haute	R. D
Given, Chas. C	Lewis	R. D
Hickson, George W	Terre Haute	R. D
Hartley, Hiram J	Terre Haute	R. D
Hickman, C. W	Fontainet	E. D
Hyde, John	Terre Haute	H. 3
Hood, Thos. C	Terre Haute	R. D
Hanes, David	Terre Haute	E. 10
Hunt, John S	Macksville	R. D
Jenkins, Wilber O	Terre Haute	R. D
Kuster, Chas. E	Terre Haute	R. D
Kenedy, Thos. W	Lewis	R. D
King, Wm. H	Fontainet	R. 10
Langhead, James T	Terre Haute	R. D
Littlejohn, H. C	Riley	R. D
Larkin, Edgar L	Terre Haute	R. D
Link, John E	Terre Haute	R. D
Leachman, James S	Burnette	R. D
Mitchell, John D	Terre Haute	R. D
Melton, Seth B	Burnette	R. 3
Moorhead, Thos. W	Terre Haute	R. D
Mattox, Wm. R	Youngstown	R. 3
Morgan, John H	New Goshen	R. D
Moore, Wilmot	Terre Haute	H. D
Moore, James A	Prairie Creek	R. D
Mann, Henry D	Terre Haute	R. D
McCorkle, Thos. H	Ellsworth	R. D
McLaughlin, James	Seeleyville	R. D
McClain, Leslie	Terre Haute	R. D
McJohnson, A. D	Pimento	R. D

Name.	*Post Office.*	*School.*
McGrew, Jas. E	Terre Haute	R. D
Nebergall, Jas. W	Prairie Creek	R. 10
Preston, Saml C	Terre Haute	R. D
Pike, Lyman	Terre Haute	E. 10
Pence, Allen	Terre Haute	P.-M. 10
Pinson, Andrew J	New Goshen	R. D
Poindexter, John	Nelson	R. D
Roberts, Wm. H	Terre Haute	R. D
Richardson, Saml. C	Terre Haute	P.-M. D
Russell, Chas. W	Riley	R. D
Ryan, Wm. E	Terre Haute	R. D
Swafford, Benj. F	Terre Haute	R. D
Spain, Archibald W	Terre Haute	R. D
Schreiner, Bernhardt	Terre Haute	P.-M. D
Shaley, Frederick W	Terre Haute	R. D
Stunkard, Thos. C	Terre Haute	R. D
Stetson, Edwin F	Terre Haute	R. D
Swap, John H	Sandford	R. 10
Shickel, John F	Terre Haute	R. 10
Stark, Wm. I	Coal Bluff	H. D
Stock, Louis K	Lewis	E. D
Smith, Wm	Lewis	R. 3
Stewart, Harvey W	Terre Haute	R. D
Spencer, Wm. B	Terre Haute	R. D
Stevenson, Wm. M	Terre Haute	R. D
Treat, Horace J	Terre Haute	E. D
Toby, Orlando C	Terre Haute	R. D
Tomlin, Benj. F	Terre Haute	R. D
Thompson, J. C	Terre Haute	R. D
Taylor, Elizabeth P	Terre Haute	H. 3
Willien, Leon J	Terre Haute	R. D
Waters, Moses H	Terre Haute	H. D
Weinstein, Leo J	Terre Haute	R. D
Watkins, Saml	Terre Haute	R. D
Worrell, J. P	Terre Haute	R. D
Young, Stephen J	Terre Haute	R. D

Regular, 75; Eclectic, 9; Homeopathic, 6; Physio-Medical, 3.

Wabash County.

Ader, Henry	Somerset	R. D
Biggerstaff, J. T	Lagro	R. 3
Bloomer, F. H	Pleasant View	R. D
Blount, R. F	Wabash	R. D
Brady, T. R	Lincolnville	R. D
Broadbeck, G. H	Roann	R. D
Brown, John W	Wabash	R. D
Bricker, Wm	Lincolnville	E. 3
Carper, A. J	Liberty Mills	R. D
Dicken, J. L	Lafontaine	R. D
Dicken, C. L	Lafontaine	R. D
Donaldson, E. F	Wabash	R. D
Dunn, W. H	Wabash	H. D
Ellis, C. S	Wabash	E. 10
Ford, Jas. H	Wabash	R. D
French, P. J		R. D
Ginther, David	North Manch'tr.	E. 10
Goshorn, D. A	North Manch'tr.	R. 10
Hale, M. L	Lagro	R. D
Holoway, A. L	Wabash	E. D
Hubbard, Chas		N. R. D
Jessup, Louisa F	Wabash	R. D
Jones, Joseph H	Roann	R. 10
Kantz, Jno	Dora	R. D
Kidd, G. P	Roann	R. D
Lambert, Geo. W	Urbana	E. D
Lower, Melvin	North Manch'tr.	R. D
Lower, Jno. M		R. D

Modracer, Jno M	Wabash	R. 3
McGrew, W. H	Lafontaine	E. D
Mooney, H. C	Laketon	R. D
Macey, E. F		H. D
Minnick, H. R	Treaty	R. D
Moore, Perry G	Rich Valley	R. D
Mann, J. E		H. D
Misener, H. E		P.-M. D
Murphy, Reuben		N. R. 10
O'Neal, Laughlin	Somerset	R. D
Renner, Jno. H	Lagro	R. D
Renner, M. E	Lagro	R. D
Richards, Jno	North Wabash	R. 3
Shaffer, Philip	North Manch'tr.	R. D
Stradley, D. W	Wabash	R. 10
Shellhamer, C	Pucker Brush	E. D
Smith, A. J	Wabash	R. D
Studley, J. W	Lafontaine	R. D
Taylor, Zachary		R. D
Thomas, A. McD	Lafontaine	R. D
Trembley, G. D		R. D
Wallace, L. S		R. D
Wale, F. M	Urbana	R. 10
Welshiner, Jno. M	North Manch'tr.	H. D
Wells, Wm. Y	Laketon	E. D
Winton, Horace	North Manch'tr.	R. D
Yagerheimen, Jno		N. R. 10

Regular, 38; Eclectic, 8; Homeopathic, 4; Physio-Medical, 1; not reported, 2.

Warren County.

Name.	*Post Office.*	*School.*
Birch, E. R	State Line	R. D
Burris, S. O	Carbondale	R. 3
Campbell, T. B	West Lebanon	R. 3
DeHart, J	Williamsport	R. 3
Fenton, S. C	Pine Village	R. 3
Fleming, J	West Lebanon	R. 10
Green, W. H	Hedrick	R. —
Hoffman, C. H	Rainsville	R. D
McMullen, J. W	Pine Village	R. 3
Osburn, S. N	Rainsville	R. D
Porter, A. M	State Line	R. D
ROSS, JUSTIN	Williamsport	R. D
Reid, S. M	Independence	R. D
Roseberry, J. A	Independence	R. D
Stewart, J. C	Marshfield	R. D
Swank, L	Williamsport	R. D
Trent, J. H	Marshfield	E. 10
Vick, W. B	Poolsville	E. D
Wicoff, Robert	Winthrop	E. 10

Regular, 16; Eclectic, 3.

Warrick County.

Beeler, J. S	Boonville	E. D
Brown, A. P	Heilman	R. 3
Baldwin, I. J	Lynnville	E. D
Camp, George H	Lynnville	E. 10
Camp, Joe W	Lynnville	E. 10
Camp, W. O	Dickeyville	E. 10
Dailey, W. W	Boonville	R. 10
Dailey, T. G	Boonville	R. 10
DeForrest, D. A	DeForrest	R. D
Dubois, J. N	Newburg	H. D
Dailey, Thos. J	Tennyson	R. 10
Edgington, Jesse	Yankeetown	R. D
Grimm, Simon	Elberfeld	R. D
Howard, Thos. J	Boonville	R. D
Hargan, Thos. J	Boonville	R. D
Hatfield, B. F	Wheatonville	R. D
Hewins, W. A	Chandler	R. D
Hunt, W. A	Lynnville	R. 10
Hedden, G. J	Selvin	R. 10
Hammel, John	Ditney	R. D
Jones, Thos. B	Lynnville	R. D
Keegan, C. J	Canal	R. D
Keifer, C. E	Newburg	R. 10
Lake, George	Newburg	R. D
Morganheimer, P	Elberfeld	R. D
Mills, W. H	Folsomville	R. D
McCoy, T. J	Eby	R. 10
McVey, W. H	Selvin	R. 10
Patterson, P. N	Boonville	H. 10
Quiatt, Allison	Tennyson	R. 10
SCALES, W. B	Boonville	R. D
Steward, O. H	Boonville	H. D
Shawl, M	Boonville	R. D
Smith, Thos	Canal	R. D
Slaughter, W. W	Newburg	R. D
Temple, W. R	Selvin	R. 10
Tyner, S. L	Boonville	R. D
Tilman, J. R	Newburg	R. D
Thompson, P. S	Newburg	R. D
Vollmer, Joseph	Elberfeld	R. D
West, E. A	Folsomville	R. 10
Wilson, Wesley	Yankeetown	R. D
Watson, W. D	Tennyson	R. 10
Zimmerman, J	Lynnville	R. 3

Regular, 36; Eclectic, 5; Homeopathic, 3.

Washington County.

Avery, William R	Fredricksburg	R. D
Applegate, Geo	Boston	N. R. 10
Bare, John R	Salem	R. D
Bradshaw, A. E	Salem	R. D
Bright, Will H	Martinsburg	R. D
Barnett, John T	Hardinsburg	R. D
Baker, T. H. B	Pekin	R. D
Brannock, B. B	Little York	R. 3
Crim, Martin	Salem	P.-M. 10
Child, Royal B	Claysville	R. 10
Duff, Sam. D	Salem	R. D
Dewees, Geo. W	Fredricksburg	R. 10
Ferree, Isaac	Livonia	R. D
Fouts, Henry C	Hardinsburg	R. D
Hudson, Lycur. H	Little York	E. D
Hobbs, Havilla C	Salem	E. D
Herron, Thom. W	Little York	R. 10
Hancock, George	Campbellsburg	R. D
Hall, Ivey	Campbellsb'g	P.-M. D
Howard, Sam. B	Kossuth	R. 3
Hogsett, J. W	Saltilloville	R. D
Harrod, Sam. B	Canton	R. D
Hoggatt, Mahlon L	Salem	E. 10
Henderson, Harvey D	Salem	R. D
Henderson, Jas. P	Salem	R. D
Hon, Geo. W	Hardinsburg	R. 10
Lockhart, Thomas	Campbellsburg	R. 3
Layman, James H	Chestnut Hill	R. 10
MURPHEY, C. W	Salem	R. D
Martin, Rob't. W	Campbellsburg	R. D
Maxedon, Rob't. W	Hardinsburg	R. D
McPheeters, John S	Hardinsburg	R. D
Mitchell, James J	South Boston	R. 3
Martin, L. D	Martinsburg	N. R. 10
Martin, Will. H	Campbellsburg	R. 10
Neal, George L	Salem	R. D
Neyman, E. M. C	Saltilloville	R. 10
Oatley, John H	New Philadelp'a	R. 10
Overman, William	Salem	P.-M. D
Overman, E. T	Salem	P.-M. D
Paynter, C. L	Salem	R. D
Perkhiser, W. J	Livonia	R. D
Rathburn, Charles	Salem	R. 10
Roberts, Sam. A	Fredricksburg	R. D
Spurgeon, Ambrose M	Rush Creek Vy	R. D
Schoonover, Will. S	Hardinsburg	R. 10
Tucker, Thomas M	Salem	R. D
Voyles, Virgil A	Livonia	R. 3
Wier, Alonzo G	Kossuth	R. D
Wilson, Richard J	Salem	R. D

Regular, 41; Eclectic, 3; Physio-Medical, 4; not reported, 2.

Wayne County.

Name.	*Post Office.*	*School.*	*Name.*	*Post Office.*	*School.*
Allen, John B	Hagerstown	R. D	Lowe, Geo. N	Cambr'ge City N.	R. 10
Bond, Chas. S.	Richmond.	R. D	Kelsey, Leverett S	Richmond.	R. D
Baer, Oliver P	Richmond.	H. D	Kersey, Chas. A	Richmond.	R. D
Benham, Harvey R.	Richmond.	E. D	Kersey, Silas H.	Centreville	R. D
Ballard, Nathan H	Richmond.	R. D	King, Wm. F	Centreville	R. D
Boyd, H. B	Cambridge City	R. D	King, Jas. E	Richmond.	R. D
Bunnel, Rhodes W	Greensfork	R. D	Moore, Chas. H	Richmond.	R. D
Blount, Cyrus N	Hagerstown	R. D	Mauk, John R	Cambridge City	R. D
Bappart, A	Richmond.	R. 10	Marshall, James V	Whitewater	R. 10
Boyd, Samuel Scott	Dublin	R. D	Mendenhall, Wm. O	Richmond.	R. D
Buntin, Edwin A.	Greensfork	R. D	Morrow, Sarah J	Richmond.	R. 3
Colburn, Clarence P	Richmond.	R. D	Moore, Silas H	Greensfork	R. D
Canaday, N. F	Hagerstown.	H. D	Mitchell, Robt. S	Richmond.	R. D
Clark, John M	Economy	R. 10	McTaggart, Chas	Dublin	E. D
Clark, J. B	Economy	R. D	McDivitt, Eli G.	Richmond.	H. D
Courtney, James T	Whitewater	R. 10	Neff, W. Webster	Centreville	R. 3
Carpenter, Daniel L	Cambr'ge City N.	R. 10	Patterson, Evan L	Richmond.	R. D
Carter, Nathan P.	Greensfork	R. D	Rusk, Anne E	Richmond.	P.-M. D
Dwiggins, Moses F	Richmond.	R. D	Reed, Wilson	Centreville	R. D
Davis, T. Henry	Richmond.	H. D	Rife, John J	Boston	R. D
Day, G. Ward	Dublin	H. 10	Rutledge, John W	Cambridge City	R. D
Emmons, Joshua.	Richmond.	H. D	Study, Joseph N	Cambridge City	R. D
Furnas, Robert F.	Richmond.	H. D	Sweney, Isaac F	Milton	R. D
Grosvenor, E. B	Richmond.	H. D	St. Clair, John W	Milton	R. 10
Griffis, Wm. T	Whitewater	E. D	Southworth, A	Dublin	H. D
Gabel, Harrison	Centreville	R. D	Swallow, J. E.	Abington	R. D
Graham, Wm. B	Cox's Mill.	E. 3	Shoff, Jacob S	E. Germantown	R. D
Green, Daniel W		P.-M. D	Summers, John B	Milton.	R. D
HIBBERD, JAS. F.	Richmond.	R. D	Schiltueck, V. G	Economy	R. D
Harold, C N	Richmond.	P.-M. D	Stonebraker, John H	Dalton	E. 10
Hobbs, M. W	Richmond.	R. D	Taylor, James E	Richmond.	R. D
Howells, Joseph	Richmond.	H. 10	Tillson, Hosea	Centreville	R. 10
Helm, Wm. M	Williamsburg.	E. D	Taylor, Livingston B	Dublin	R. 10
Hadley, Edwin	Richmond.	R. 10	Thomas, Mary F	Richmond.	R. D
Huff, Oliver N	Fountain City.	R. D	Thomas, Owen	Richmond.	R. D
Homsher, Geo. W	Dublin	E. 10	Thurston, Eli H	Hagerstown	P.-M. 10
Harris, John S	Fountain City.	R. D	Thurston, Jos. M	Hagerstown	P.-M. D
Haynes, M. H	Richmond.	R. D	Teague, Isaac C	Richmond.	H. 10
Haines, James W.	Richmond.	H. D	Taylor, Linas P	Williamsburg.	E. D
Intzi, Joseph	Richmond.	R. D	Weist, J. R	Richmond.	R. D
Jay, Wm. C.	Richmond.	E. D	Williams, William	Whitewater.	E. 10
Johnson, Levi Coffin	Fountain City.	R. D	Wampler, John M	Richmond.	R. 3
Loar, Apollos.	Richmond.	P.-M. D	Wright, Iry Elisha	Hagerstown	E. D
Luken, John H	Richmond.	R. D	Witmer, Benj. M	Milton.	E. 10
Lewis, Emma B	Richmond.	R. D	Wayman, Jas. V	Cambridge City	R. D

Regular, 59; Eclectic, 12; Homeopathic, 12; Physio-Medical, 5; not reported, 2.

Wells County.

Bergman, N	Tocsin	E. 10	Gregg, Henry.	Bluffton	R. D
Bruce, J. H	Bluffton	R. D	Horton, E R	Bluffton	E. D
Cassell, G. W	Dillman	R. D	Horton, Theo	Bluffton	R. 10
Cook, T. H	Bluffton	R. D	Maddox, L. E.	Keystone	R. D
Conner, J. T	Dillman	P-M. D	Mann, J. E	Mt. Zion.	H. D
Crum, J. W	Barber's Mills.	R. D	Mason, Leonidas	Bluffton	R. D
Cummins, B. F	Bluffton	R. D	Melsheimer, C. T	Bluffton	R. 10
Cummins, Pres R.	Zanesville.	R. D	Metts, J. I	Ossian	R. 10
Davenport, E. P	Craigville	R. 3	Metts, A. H.	Ossian	R. 10
Doster, E. P	Poneto.	R. D	Morris, Thomas.	Poneto.	R. D
English, C. H	Bluffton	R. D	Murray, L. E	Zanesville.	R. D
Fitzpatrick, J. D	Newville.	E. 10	Neff, I. N.	Mt. Zion.	E. 10
Fulton, G. E	Bluffton	R. D	Newman, M. N	Ossian	R. D
Fulton, John C	Murry	R. 10	Spaulding, T. A	Bluffton	R. D
Garrett, F. W.	Liberty Center	R. D	Waldron, R. A	Bluffton	E. 10
Goodin, S. A	Mt. Vernon	R. 10	Walser, J. H	Vera Cruz	E. 10
GORRELL, A. G	Bluffton	R. D	Weer, H. H	Bluffton	E. D

Regular, 25; Eclectic, 7; Homeopathic, 1; Physio-Medical, 1.

White County.

Name.	*Post Office.*	*School.*
Abbott, B. F	Wolcott	R. 3
Bellow, A. B	Burnettsville	R. D
Baugh, W. J	Chalmers	R. D
BUSHNELL, S. B	Monticello	R. 10
Carr, Jas. L	Monon	R. D
Cowgen, S. R	Monticello	E. D
Clark, R. J	Monticello	R. D
Cooper, Wm. B	Monticello	R. D
Clayton, Geo. R	Monon	R. D
Delzell, R. M	Reynolds	R. 10
Didlake, M. T	Monticello	R. D
Grant, F. A	Wolcott	R. 3
Holloway, J. H	Monticello	E. D
Huey, R. B	Buffalo	R. D
Henry, L. W	Burnettsville	P.-M. 10
Jones, A. B	Burnettsville	R. D
Kelly, D. M.	Brookston	R. D
Medaris, John	Brookston	R. 10
McAllister, J. W	Idaville	R. 3
Palmer, R. B	Idaville	E. 10
Reed, J. T	Monon	R. 10
Robison, F. B	Monticello	E. D
Reed, John A		R. D
Spencer, Wm	Monticello	R. D
Smith, J. T	Brookston	R. D
Scott, Caleb	Monticello	P.-M. 10
Sluyton, S. D	Reynolds	E. 3
Sampson, W. H	Brookston	E. 10
Welty, Isadore	Buffalo	P.-M. 10

Regular, 20; Eclectic, 6; Physio-Medical, 3.

Whitley County.

Ammerman, S. D	Columbia City	H. 10
Coyle, J	Hecla	R. D
Criswell, Jno. F	Churubusco	R. D
Eberhardt, E. L	South Whitley	R. D
Eckman, G. W	Coesse	R. 10
Egolf, H. M.	Dunfee	R. D
Grizier, F. G	Collins	R. D
Ireland, Martin	Columbia City	R. D
Kirkpatrick, D	Larwill	R. D
Kithcart, N. I	Columbia City	R. D
Koontz, Sylvanus	Laud	R. D
LAWRENCE, I. E	Columbia City	R. D
Linville, D. G	Columbia City	R. D
Louder, Christian	Larwill	R. D
Magers, M	Churubusco	E. 10
Merriman, E	South Whitley	R. D
Mitten, A. P	Columbia City	R. D
Richards, Jno	Laud	E. D
Squires, James	Churubusco	R. D
Scott, J. A	Hecla	R. D
Webster, Wm	Columbia City	R. D
Webster, M. W	South Whitley	R. D
Webster, David	Larwill	R. D
Winger, N. R.	Coesse	R. D
White, F	Laud	R. 3
Williams, C. S	Columbia City	R. 10

Regular, 23; Eclectic, 2; Homeopathic, 1.

RECAPITULATION.

Regulars	3,168
Eclectics	470
Homeopathic	183
Physio-Medical	107
Not reported	208
Total	4,136

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